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INDUSTRIAL CANADA

Issued monthly as the official publication of the Canadian Manufacturers Association (Incorporated), and devoted to the advancement of the industrial and commercial prosperity of Canada.

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INDUSTRIAL CANADA

ISSUED BY

The CANADIAN MANUFACTURERS ASSOCIATION.

INCORPORATED.

Vol. XX. TORONTO, MAY, 1919 No. 1

Editorial Comment

The Need for Protection

"THOSE in this country who are so assiduously urging the lowering of the tariff barriers, have a very poor conception of the necessity for protection, and more protection in the Dominion, when they advocate that Canada should become the dumping ground for America's surplus products," says the British Columbia *Colonist*. "Given the opportunity, she could sell cheaper in Canada, but the result would be unemployment in those local industries that would be affected by a reduction in the present tariff. The prairie farmers' desire for freer trade with America is dictated by selfish reasons."

The *Colonist* proceeds to give a very able defence of the doctrines of protection. The sentiment at present, as in the past, in British Columbia is running strongly in support of reasonable protection for Canadian industry. This policy is confined not only to the industrial and business population, but has also been endorsed by the United Farmers of British Columbia and the British Columbia Fruit Growers' Association. It would appear that all classes in British Columbia are solidly united against any change in the fiscal policy under which Canada has prospered.

Labour

WAGES must always bear an intimate relation to the cost of living because they constitute the chief factor which determines the cost of living. The price paid to labor in producing any article largely determines the cost of that article to the consumer. This well-known law is responsible for what is described as the "vicious circle." Every working man is a consumer of the products which are made by other working men. His cost of living is determined by the wages which his fellow-workmen get for making the boots and clothing which he and his family wear, by the wages which the workmen get who manufacture the materials from which his house is built, and by the wages which are paid to the workmen who transport him from place to place. This is so elementary that it appears strange that it would be necessary to refer to it, and yet it is the point which is constantly overlooked. It is the purchasing power of wages that is important. The nominal amount signifies nothing. So long as each group of workers keep driving up their wages by concerted action, how can the cost of living come down?

Doing Good Constructive Work

A WORD of commendation should be accorded the Montreal *Star* for its enterprise and useful service in featuring every other week in its Saturday edition a two-page department entitled, "Canada in the Building." The purpose of the department is to educate the public through contributions from the persons who are recognized as knowing the most about all questions affecting production. So far in the series are to be noted articles from C. B. Hibbard, manager bond department of St. Cyr, Gonthier E. Frigon, on railway administration; from Arthur Surveyer, member of the Advisory Council for Scientific and Industrial Research, on "Making Our Titaniferous Iron Ore Valuable"; from Ferd. van Bruyssel, C.E., D.P.Sc., on "Suggestions for Stimulating Canadian Production and Export Trade"; from Dr. E. B. Fernow, Dean of the Faculty of Forestry, University of Toronto, on "Forestry in Eastern Canada"; from Prof. A. P. Coleman, M.A., Ph.D., University of Toronto, on "The Nickel Industry in Canada"; from Alfred W. G. Wilson, Ph.D., on "Pyrites and Industry," and others.

It is gratifying to note when so many publications in Canada are levelling destructive criticism against our industries, that here and there some newspaper is stepping beyond the narrow vision of the fault-finders and viewing the situation from a broad, constructive standpoint.

Industrial Unrest

THERE is some real industrial unrest in Canada, but there is also a considerable amount of manufactured unrest which has been artificially stimulated by those who hope to profit from it. It would be impossible to escape unrest during the process of getting a half million men out of the army and back into civil life. The amazing thing has been that there has been so little. The encouraging feature is that employers, employees, soldiers, civilian societies and the public generally have tried so hard and successfully to get the thing done. We have got through

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the crisis of the winter. Demands for workers are becoming more numerous as the spring and summer activities get under way. There has been no real industrial trouble in Canada. There are new problems to be met. New ideas are in the air. These are being examined to see what they are worth. There will always be disputes so long as there are two sides to a question, but in going into the factories and talking to the men in them, disinterested investigators would find that there are very few real grievances which cannot be solved by co-operation and compromise. After the extreme people on both sides get through talking, the tolerant and sensible men get something done. The employers know that they must co-operate with their employees. The sensible employees, and they are in the majority, know that labor is the chief cost of production. They know that this cost can be increased only to a certain point. After that point the selling price of the article is forced upward, and the article cannot be sold on the market under competition, either at home or abroad. They know that their living depends entirely on the sale of that article in sufficient quantities to keep a factory running. Therefore, questions of hours and wages always bear directly on this point and cannot be divorced from it.

Mr. John McClary on the Tariff

THE following letter, written by Mr. John McClary of The McClary Mfg. Co., London, Ontario, to Mr. Hume Cronyn, M.P. for London, was published in the *London Free Press,* points out that the Western United States passed through the same agitation which is now affecting Western Canada:

Hume Cronyn, Esq., M.P., Ottawa:

DEAR MR. CRONYN.—Permit me, through your valuable services, to say something on the tariff question.

The present persistent efforts of the West to lower our tariff beyond safe limits for this country, if successful, will bring disaster on our cities. I estimate that more than one-half of the population in our eastern cities is supported directly or indirectly through the factories. Should seriously disturbed tariff be enforced our factories would tumble like ninepins. Banks would suffer losses through advances to manufacturers. Insurance, loan and trust companies would suffer heavy losses through loans on city property. Labor would have to seek employment from our ample, protective neighbors across the border. We would be required to remit our liquid assets, so necessary for the development of our country, to keep control of exchange within moderate limits.

The United States has passed through the same persistent efforts in settling up their great western country. The West wanted to sell in an open market regardless of the interests of the other sections of the country, when manufacturing began to develop and build up cities in the West, creating great home markets for the products of the farm—the best of all markets; this counteracted the farm produce. The great cities, built through wise, substantial protection, insured employment to the people, creating wealth that is the envy of the world, in developing their great resources, which were second to none, except, possibly, the great undeveloped resources of our own country.

Are we to pursue a smaller course in developing our country, or are we to be permitted to see our tariff broken down, destroying the basis of development and affording an opportunity for our great rivals across the border to utilize this country as a feeding ground?

Our Government is loaning money to cities to build dwellings in order to relieve the present necessity of housing the people. Should our tariff, unfortunately and unwisely be broken down, within two or three years dwelling houses would go begging for occupants for the payment of taxes. This may appear to many to be a wild assertion. The Good Book tells us, "Where there is no vision the people perish." This is my vision. I think it is well within reasonable anticipation of the thoughtful man.

Yours truly,

London, April 30. (Signed) JOHN MCCLARY.

The Western States had to make their choice between Free Trade and Protection. They chose Protection. The growth of the Western States in agriculture, in industry and in all other departments of activity justifies the choice. The speeches and arguments in favour of lower tariffs and free trade which are now being made in Western Canada are the old arguments which were used ineffectively many years ago in a similar controversy in the Western States. Will be more effective in Western Canada to-day than they were in the Western United States?

Not All Free Traders

THAT the Grain Growers' organizations in Manitoba, Saskatchewan and Alberta do not represent all the farmers of Western Canada is shown by the resolutions recently passed in British Columbia by the United Farmers of British Columbia and the British Columbia Fruit Growers' Association, which will be found on page 53 of this issue. The demands of western grain growers for sweeping tariff reductions, leading up to free trade, do not get any sympathy from the farmers of British Columbia.

As the farmers of British Columbia are apparently solidly against the tariff proposals of the Western Grain Growers, and since the majority of the farmers in Ontario, Quebec, and the Maritime Provinces have not renounced their belief in the national policy of protection, which they have supported for forty years, the free trade group, which dominates the Grain Growers' Company, does not seem to have been very successful in convincing the farmers of Canada that the "Farmers' Platform," created by the Canadian Council of Agriculture under the guidance of certain grain growers, is a safe platform for the farmers.

England as a Protectionist Country

IN the preamble to its platform, the Canadian Council of Agriculture makes the following reference to the fiscal policy of Great Britain:

"And whereas the war has revealed the amazing financial strength of Great Britain, which has enabled her to finance, not only her own part in the struggle, but also to assist in financing her allies to the extent of hundreds of millions of pounds, this enviable position being due to the free trade policy."

The inference that Great Britain owes her enviable position entirely to the policy of free trade is not in accordance with the facts of economic history. In England, Cromwell, and in France, Colbert, were the first statesmen to devise a genuine protective system, in place of the existing fiscal systems which were designed to secure

revenue only from the national tariffs. Colbert defined the principal objects of the protective system as follows:

1. To prevent the importation of manufactured goods by the means of protective duties.
2. On the other hand, to favor the importation of raw materials and all commodities used in manufacture by reducing duties and all other charges which might restrict such importation.
3. Above all to encourage the exportation of national products by reducing taxes, or, if need be, by granting subsidies and bonuses.

Oliver Cromwell, in England, supplemented the protective tariff by the famous Navigation Act of 1651, which stipulated that all goods brought into England should be carried in English ships. The protective system remained in force in England from the time of Oliver Cromwell until 1845, when the repeal of the Corn Laws introduced what has been called the free trade system into England. It must be remembered, however, that even under free trade, England retained customs duties of a fiscal character, the operation of which constituted what is known as "tariff for revenue." Such duties were imposed by England, for example, on tea, coffee, sugar, tobacco, and wine. These duties are called fiscal because England did not wish to produce, or could not produce, any such commodities on her own soil. The British Government decided to re-establish certain customs duties in order to pay expenses on the South African war which gave a protective character to certain tariff schedules.

Consequently, England was among the first countries to adopt what is known as the protective principle in forming her tariffs, and she extended it to cover her shipping as well as her manufactures. During the period of nearly 200 years while England maintained a national protective tariff, she reached the position in international affairs in trade which she occupies to-day, that is she led the world.

Having secured this position she could afford to experiment. The theory which caused the partial change in her fiscal policy was this: England, an island, possesses the greatest mercantile marine in the world, and as she was not growing enough food to feed her people she believed that if she could import food and raw materials without duty she would get cheap food, clothing, housing, etc., for her workmen. As these are the chief expenditures of workmen, such workmen would be able to take lower wages. As wages are the chief factor in the cost of production, it follows that low wages would cause low selling prices. The same applied to the merchant marine. If sailors got cheap food, cheap clothing, and cheap houses, they could take low wages and consequently transportation rates would also be low. In other words, it was hoped that, chiefly on account of driving wages down to the lowest possible point, England might be made the workshop of the world, buying in other countries the food and raw materials she did not produce, carrying them cheaply to England in her own ships, manufacturing them cheaply at home in England and sending them abroad again cheaply as manufactures in her own ships. The same theory was acted upon by Holland, Norway, and Denmark, all nations which depend largely on their sea-borne commerce.

The free trade doctrine governed English tariffs, with the modifications mentioned from the repeal of the Corn Laws till the war, a period of about seventy years. During that time England retained her position as the foremost trading nation of the world, but whether this was due to the alteration in her fiscal policy, as the free traders claim, or whether it was due to the continued momentum of the prosperity which she had gained under 200 years of protection, as the protectionists claim, is a matter still open to argument. It is worth noting, however, that the enormous growth of the trade of protected nations such as Germany, France, and the United States caused the most serious misgivings in England during the ten years previous to the war. It is most significant to note that with the close of the war Great Britain adopted the most complete protection that has ever been adopted in any other country. This protection amounts to almost prohibition of imports from other countries. The only modification permits the importation of goods from the British Dominions.

Therefore, the fiscal system of England since 1651 has been: protection for about 200 years; free trade modified by impositions of tariff for revenue about 70 years; and now a return to the highest protection which has existed in English history.

Labour Clauses in the Peace Treaty

THE following nine clauses, proposed by the Commission on International Labor Legislation for insertion in the Peace Treaty, were adopted by the Peace Conference at Paris on April 28th:

(1) That labor should not be regarded merely as a commodity or article of commerce.
(2) The right of association for all lawful purposes by the employed as well as by the employers.
(3) The payment to the employed of a wage adequate to maintain a reasonable standard of life as this is understood in their time and country.
(4) The adoption of an eight-hour day, or a 48-hour week, as the standard to be aimed at where it has not already been obtained.
(5) The adoption of a weekly rest of at least 24 hours, which should include Sunday whenever practicable.
(6) The abolition of child labor and the imposition of such limitations on the labor of young persons as shall permit the continuation of their education and assure their proper physical development.
(7) The principle that men and women should receive equal remuneration for work of equal value.
(8) The standard set by law in each country with respect to the condition of labor should have due regard to the economic treatment of all workers lawfully resident therein.
(9) Each state should make provision for a system of inspection in which women should take part in order to insure the enforcement of the laws and regulations for the protection of the employed.

The adoption of the above clauses by the Peace Conference is of the greatest importance, as this action constitutes an international basis for labor legislation. The chief difficulty in the past has been that where the employers of one country desired to improve labor conditions they were prevented from doing so by the fact that countries which had not taken similar steps would be able to compete more favorably against them in the world's markets, owing to their ability to sell their goods at lower prices based on lower labor cost.

Invitation to the Annual Convention of the Canadian Manufacturers Association

TORONTO, May 1st, 1919.

To Members:

You are hereby notified that the Annual General Meeting of the Canadian Manufacturers Association for 1919 will be held in the King Edward Hotel, Toronto, on June 10th, 11th and 12th next. Business will commence at 10.30 a.m. on June 10th.

I earnestly hope that you will make a special effort to attend in order to give the Association the benefit of your co-operation and advice in solving the difficult problems which are now confronting the manufacturers of this country.

The Association is now entering what may be described as the third period of its history. During the first period, from 1872 to 1899, its activities were provincial and its membership limited to about 300. During the second period, from 1899, when it was organized as a National Association, to the signing of the armistice, the membership increased from about 300 to nearly 3,500, and branches were organized from coast to coast. The second period saw a great growth of manufacturing. The present period, beginning with the signing of the armistice, will be the period of readjustment from war to peace conditions, the continued and rapid development of Canada as a nation, and, I hope and believe, a corresponding development in the activities of the Association and in the increase of its membership.

Three of the most important matters for discussion at the Annual Meeting are the readjustment of the existing relations between employers and employees, the revision of the tariff and the development of export trade. In addition, there will be reports of the various committees which, during the past year, have dealt with an unusually large number of subjects of vital importance to Canadian manufacturers. It is from the views and decisions of the members present at the Annual Meeting that the policy of the Association for the coming year is largely shaped.

The programme outlining the business to be transacted will be mailed to you in due course. I appeal to you to make a special effort to be present.

Anticipating the pleasure of meeting you in Toronto on the above dates,

I remain,

Yours faithfully,

W. J. BULMAN,

President.

News and Views of the Association

There will be found each month in this department a record of the various activities of the Canadian Manufacturers Association during the preceding month. The information is supplied to INDUSTRIAL CANADA officially, and all members of the Association are urged to acquire the habit of reading and checking over the contents of the department carefully in order to keep themselves posted on the work of the Association

Mr. Lloyd Harris Will Attend Convention

Mr. Lloyd Harris, Chairman of the Canadian Trade Mission in London, England, will attend the Annual General Meeting of the Association in June.

Vancouver Island

A Section of the British Columbia Branch is being formed among the manufacturers of Vancouver Island, to be known as the Victoria and Vancouver Island Branch of the Association.

Handbook for Exporters

Arrangements have been made with the Canadian Trade Commission at Ottawa to send to all members of the Association a publication issued by the Canadian Trade Commission, entitlted: *"Handbook for Exporters."*

Labour Appeal Board

The representatives of manufacturers on the Labour Appeal Board now are: S. R. Parsons, Toronto; William Rutherford, Montreal. Alternative member, B. W. Coghlin, Montreal.

Amendments to By-Laws

Any member of the Association desiring to move an amendment to the By-Laws must give twenty days' written notice of the same. Notice of motion, therefore, must be in the hands of the General Manager of the Association not later than May 20th next.

Resolutions

The By-laws of the Association require that all resolutions for submission to the Annual General Meeting shall first be considered and reported upon by the Committee on Nominations and Resolutions. All proposed resolutions, therefore, should be forwarded immediately to the General Manager for submission to this Committee.

Whitley Report

The Whitley Report and various documents relating thereto has been re-published in a single pamphlet by the Department of Labour, Ottawa. This pamphlet was issued on April 10th last. A supply was secured from the Labour Department and one copy has been mailed to each member of the Association.

Nominations and Elections

All officers and committees (except the Executive Committee, which is a Committee of the Council) are elected by a majority of the members present at the Annual General Meeting. Any active member in good standing is eligible for election to any officer or to any committee (except as above), and may be nominated therefor by any other member in good standing. To be valid, a nomination must carry with it the consent of the member nominated. All nominations, whether from individual members or a Branch, must be in the hands of the General Manager of the Association not later than May 26th.

Mr. Hughes Back from the Lyons Fair

Mr. W. P. Hughes, Secretary of the Montreal Branch, has returned from the Lyons Fair, France, where he acted as representative of the C.M.A. Mr. J. M. McIntosh, Manager of the Trade Sections Department, who was in charge of the Montreal office during the absence of Mr. Hughes, has taken up his duties at Head Office.

Dominion Insurance Advisory Committee

The Dominion Insurance Advisory Committee will meet at Ottawa on May 9th, following the Convention of The National Fire Protection Association. The C.M.A. has four representatives on this Committee, and it is hoped that all will be present at the meeting, which will be a most important one in view of the subjects which are coming up for discussion.

Answer Questionnaire

A questionnaire, asking for information which should be on file at the Head Office of the Association has been sent to all members, with the request that such schedules as they care to answer should be filled in and returned to Head Office as soon as possible. This questionnaire, after several revisions, was approved at the last meeting of the Executive Committee.

National Fire Protection Association

The Annual Meeting of the National Fire Protection Association will be held this year in Ottawa on May 6, 7 and 8. The headquarters of the National Fire Prevention Association are at Boston, Mass., and the Association includes in its membership most of the institutes of architects and engineers, insurance and fire prevention and manufacturers' association in North America. It is a very well organized Association, and keeps up a constant campaign against all kinds of fire waste. The C.M.A. has been a member of the National Fire Protection Association for some time, and will be represented at the Convention by Mr. W. H. Shapley, Chairman of the Insurance Committee. Invitations were also sent to all other members of the Insurance Committee to attend the Convention. As this Convention is a most important one, competition among

American cities to secure it is very keen, and it is a matter for congratulation that it will meet this year in Canada.

Twenty-five New Members

Twenty-five aplications for membership were accepted at the last meeting of the Executive Committee, as follows:

British Columbia—

Vancouver—Martin Senour Co., Limited, Paints and Varnishes.
Vancouver—Pride of the West Knitting Mills, Sweaters, Knit Goods.
Vancouver—J. R. Tacey & Son, Sheet Metal Workers.

Manitoba—

Winnipeg—Wakyte Mfg. Co., Limited, Trucks, Racks, Woodenware.

Ontario—

Arkona—Arkona Woollen and Knitting Mills, Yarn, Sheeting.
Burks Falls—Knight Bros. Co., Ltd., John H. Cole, Additional Representative.
Chesley—Chesley Woollen Mills Co., Tweeds, Blankets.
Hamilton—Canadian Porcelain Co., Ltd., Insulators, etc.
" —National Paper Goods, Ltd., Stationery, etc.
Mille Roches—Bennett & Messecar Co., Ltd., Pharmaceuticals.
Toronto—Consolidated Wafer Co., Ltd., Ice Cream Cones, etc.
Walkerville—Canadian Driver Harris Co., Ltd., Patterns, Castings.
Walkerville—Hartwell Bros., Ltd., Handles.
Welland—Union Carbide Co. Ltd., A. C. Morrison, Additional Representative.
Weston—K. & S. Canadian Tire & Rubber Co., Rubber Goods.
Weston—K. & S. Canadian Tire & Rubber Co., J. D. Murray, Additional Representatives.
Windsor—Windsor Pearl Button Co., Ltd., Buttons.

Quebec—

Megantic—Megantic Broom Mfg. Co., Ltd., Brooms, Clothes Pins.
Montreal—Colonial Art Works, Ltd., Silver Deposit Ware.
Quebec—Duchaine & Perkins, Boots and Shoes.
Sherbrooke—Walter Blue & Co., Ltd., Men's and Boys' Clothing.
Warwick—La Cie des Industries Cantin, Tweeds, Overcoatings.

Saskatchewan—

Regina—Crossen Metal Works, Ltd., Sheet Metal Products.
Saskatoon—A. L. Charlebois, Sheet Metal.
" —National Drug & Chemical Co., W. A. Jones, Additional Representative.

Royal Commission on Industrial Relations

A Royal Commission on Industrial Relations was created under Order-in-Council dated April 4th, 1919, with duties defined as follows:

1. "To consider and make suggestions for securing permanent improvement in the relations between employers and employees."

2. "To recommend a means for insuring that industrial conditions affecting relations between empolyers and employees shall be reviewed from time to time by those concerned with a view to improving conditions in the future."

For the above purposes the Commission was instructed:

1. "To make a survey and classification of existing Canadian industries."

2. "To obtain information as to the character and extent of organization already existing among bodies of employers and employees, respectively."

3. "To investigate available data as to the progress made by establishing Joint Industrial Councils in Canada, Great Britain and the United States."

Under Order-in-Council dated April 9th, 1919, the personnel of the Commission was announced as follows:

The Hon. Chief Justice Mathers, of Manitoba, Chairman.
The Hon. Smeaton White, a Member of the Senate, and Managing Director, Montreal Gazette Publishing Co., Montreal.
Charles Harrison, M.P., Railroad Conductor, North Bay, Ont., as representative of the Public.
Mr. Carl Riordon, President, Riorden Pulp and Paper Co., Montreal, Que., and Mr. F. Pauze, Lumberman, Montreal, as representatives of the employers.
Mr. T. Moore, Ottawa, President of the Trades and Labour Congress of Canada; Mr. J. W. Bruce, of Toronto, Member of the Labour Appeal Board, as representatives of the employees.
Mr. Thomas Bengough of Toronto, Secretary.

The Commission has aranged the following itinerary to cover the chief industrial centres throughout the entire Dominion:

British Columbia—April 28, 29, Victoria; April 30, May 1, 2, 3, Vancouver.
Alberta—May 5, 6, Calgary; May 7, Edmonton.
Saskatchewan—May 8, Saskatoon; May 9, 10, Regina.
Manitoba—May 12, 13, 14, Winnipeg.
Ontario—May 15, 16, Fort Wililam and Port Arthur; May 19, Cobalt; May 20, Sudbury; May 21, London; May 22, 23, Hamilton; May 26, 27, 28, Toronto.
Quebec—May 29, 30, 31, Montreal.
New Brunswick—June 2, St. John.
Nova Scotia—June 4, Halifax; June 5, New Glasgow; June 6, Sydney.
Quebec—June 9, Quebec City.

Representative manufacturers will appear at all sittings of the Commission.

The Brantford Resolution

The following resolution was passed at a public meeting held in Brantford on April 22nd:

That at this meeting, called to discuss the Tariff issues of Canada—

It is resolved that in view of the difference in interests existing in Canada to-day whereby the Western Agricultural classes urge the Government to the reducing of present tariff schedules on many commodities, and these views are largely opposed by manufacturing interests, with which interests the working classes are very closely allied.

And having in view the fact, that it is essential to find employment for a large number of workers lately released from many industries, and also to find employment for a large proportion of Canada's returning Army.

That in order to supply employment for these workers—it is necessary that every manufacturing plant, factory, or industry of any nature in Canada, should be kept in operation at fullest capacity during the whole period of reconstruction to avoid the danger of unemployment—and in order to carry on, and expand where possible, it is necessary that confidence in the stability of conditions be preserved.

And realizing that the various interests must recognize that the interests of each are inseparably bound up and are dependent upon the prosperity of the whole—and recognizing the injustice of one class seeking to benefit at the expense of another class.

We urge upon our representatives in Parliament the great importance of careful and wise handling by the Government of this Tariff issue.

And that no changes should be made in the tariff of Canada, until a Commission is appointed to investigate thoroughly and to revise and administer a tariff which will be equitable and just to all classes of the Country.

Professor McLennan's Address

An article, entitled " Science and Industry in Canada," by Professor J. C. McLennan, O.B.E., Ph.D., F.R.S., appeared in a recent issue of the "Journal of the Royal Society of Arts," London, England. Professor McLennan is head of the Physics Department of the University of

Toronto, and during the war has been one of the scientific advisers of the British Admiralty. His address is very comprehensive and indicates an extensive study of the natural resources of Canada and a number of manufacturing processes, particularly those of a chemical nature.

Arrangements have been made with the Royal Society of Arts to forward a copy of this address from London to all members of the Association. The Royal Society of Arts was founded in 1754 and incorporated in 1847. Its President is His Royal Highness the Duke of Connaught. Abbreviated extracts from the address appear elsewhere in this issue.

Progress on Trade Index

Work has been progressing on the new edition of the Canadian Trade Index, which has been authorized by the Executive Council. Copies have been made of the 7,000 forms containing the listings of the products of that number of manufacturing firms in Canada, and these are now being prepared for mailing.

A great deal of careful detail work is necessary to make a successful job of this really big enterprise. For instance, if a company has made a slight change in its name in the past three years and makes forty different articles, the old name has to be struck out in forty different and widely separated places in the old copy and the new name written in by hand.

Not only that, but all the records maintained in four different forms have to be carefully reviewed and corrected. It will readily be seen that, with the addition of new names, there is a great deal of laborious effort expended in the compilation of a book of this size and nature.

Athens Exhibition

The Federation of British Industries is holding an exhibition in Athens, Greece, from September 15th to October 15th next. The President of the Federation is Sir Vincent Caillard of Messrs. Vickers, Limited; and the General Secretary is Edmund L. Hill, 29 St. James Street, London, S.W.I.

All questions in connection with the exhibition will be dealt with by the Federation or its duly authorized representatives, whose decisions are final. Exhibitors and their staffs who will be at the exhibition must be of purely British nationality.

Items of Interest from the B.C. Branch

By H. DALTON
Secretary, British Columbia Branch

IN connection with the agitation on the part of the Grain Growers of Alberta, Saskatchewan, and Manitoba for I revision of the tariff, the following resolutions, recently adopted by the British Columbia Fruit Growers' Association and the United Farmers of British Columbia is of interest, as indicating a more reasonable attitude of this subject on the part of the fruit-growing and farming interests in this Province. The Fruit Growers' resolution reads as follows:—

"Whereas an extensive propaganda urging material reductions in customs duties with the avowed object of ultimately abolishing all such duties and the establishment of a policy of free trade, is being carried on by the organized farmers of the Provinces of Alberta, Saskatchewan and Manitoba, the objects and purposes of this propaganda being set forth in the platform adopted by the Canadian Council of Agriculture and endorsed by the organized farmers of the three Provinces named, and

"Whereas, the public announcements originating from these Associations, and representations made by them to the Federal Government convey the impression that the farmers in the western part of the Dominion are practically unanimous in support of such policy, and

"Whereas the impression thus created is not in keeping with the facts and it is important and necessary to the best interests of a large section of western farmers that such an impression should not be accepted by the Government and by the public;

"Therefore be it resolved, that we, the farmers of British Columbia as represented by the organizations named below, do not endorse or accept the tariff platform of the Canadian Council of Agriculture. That we protest against any tariff legislation in the interest of any one class or industry without due consideration of the welfare of others and the progress of the Dominion. That we favor the immediate appointment of a competent commission for the purpose of making a thorough investiation of the customs tariff with a view to preparing legislation that will best serve the interests and welfare of the whole nation;

"And be it further resolved that a copy of these resolutions be sent to each member of the Federal Cabinet, to organizations interested in tariff legislation, and that they be published in the daily press."

The resolution of the United Farmers of British Columbia is almost identical with the preceding resolution, except that the fourth and fifth paragraphs read as follows:—

Therefore be it resolved that we, the United Farmers of British Columbia, protest against any tariff legislation in the interest of any one class or industry without due consideration of the welfare of others and the progress of the Dominion. That we favor the immediate appointment of a Parliamentary Committee on which there will be a fair representation of farmer members for the purpose of making an immediate investigation of the customs tariff with a view to preparing legislation that will best serve the interests and welfare of the whole nation.

And be it further resolved that a copy of these resolutions be sent to each Member of Parliament of British Columbia, to each Member of the Federal Cabinet, to organizations interested in tariff legislation, and that they be published in the daily press.

Establishment of Department of Industries Resolution

The Legislature of British Columbia at their last session enacted a Bill entitled "The Department of Industries Act," creating a Department of the Civil Service in this province to be called the Department of Industries, and providing for the appointment of a Minister of Industries, who will be a member of the Provincial Executive; the Deputy Minister of this Department to be known as the Industrial Commissioner.

The powers and duties of this Department are set forth in the Act as follows:

"To provide for industrial research; to co-ordinate as far as possible all industrial investigation and research; and to collect and disseminate data emanating therefrom;

"To acquire and utilize in arts and manufactures the knowledge already existent in other countries;

"To carry out an economic survey of the natural resources of the province, and to furnish advice in regard to the best methods of utilizing such resources;

"To furnish advice with regard to the best methods for attacking industrial problems, for inducing industrial improvements, and for facilitating and encouraging manufacture in suitable localities;

"To co-ordinate various industries so as to obtain the best combined results and the exchange between user and manufacturer of manufacturing improvements and operating experience, and to bring together producer, manufacturer and purchaser;

"To publish technical, scientific and statistical information, and to encourage technical and industrial study by all possible means;

"To inquire and report on and aid in the establishment of any industries in British Columbia where it appears that such industries can profitably be carried on;

"To consider and initiate scientific researches in connection with or for the promotion of primary or secondary industries in the Province;

"To aid by loan, guarantee, or guarantee of securities on approved plans any enterprise calculated to encourage the economic and commercial manufacture of the natural resources or products of the Province;

"To consider and deal with plans submitted by representative bodies of returned soldiers of British Columbia for promating and providing for employment through the establishment of new industries and the development of existing industries;

"Generally for any other purpose calculated to promote the economic development of the Province."

The Act also provides for the creation of an Advisory Council, to be composed of seven members representatives of the financial, commercial, industrial, manufacturing and labor interests of this Province, to co-operate with the Minister of Industries and the Industrial Commissioner.

The Minister of Finance is empowered to borrow and ad-administer a fund of two million dollars for the carrying out of the purposes of this Act.

This piece of legislation will be considered at the next meeting of the executive of this branch, and it is hoped that this Association will be given representation on the Advisory Council referred to above.

Activities of the Maritime Province Branch

By H. R. THOMPSON
Secretary, Maritime Province Branch

A MEETING of the employers under the Nova Scotia Workmen's Compensation Act was called at Halifax, April 2nd, in an endeavor to organize an Accident Prevention Association as provided for under section 80 of the Compensation Act. Mr. C. D. Dennis, Representative of the Amherst Works of the Canadian Car & Foundry Co., Ltd., occupied the chair, and explained the urgent need of such an association. An exhaustive discussion ensued, which brought forth a motion that the meeting immediately proceed with the formation of an association as outlined.

The Secretary of the Maritime Branch presented a tentative set of constitution and by-laws, which was discussed clause by clause and with a few minor changes was later adopted as a whole. The constitution provides that each class or group under the Act shall have the right to representation on the executive committee, and thereby a voice in the affairs of the association. Provision has also been made for the formation of "sections" to take care of the work and to deal with the questions which are peculiar to the particular classes or groups under the Act. A "section" shall comprise only the employers in the trade, industry, group, class or sub-class represented by such "section." A "section," when properly organized, shall have the power to make rules and regulations, which, when approved by the General Executive Committee and the Compensation Board, shall be binding on all the employers in the industries represented by such "section."

The intention is that the expenses of the Association shall be paid from the accident funds set up under the Act, and charged to the account of the proper group, class, or sub-class.

The officers, who were appointed, were as follows:—

President—C. D. Dennis, Canadian Car & Foundry Co., Amherst, N.S.
First Vice-President—G. D. Macdougall, Nova Scotia Steel & Coal Co., New Glasgow, N.S.
Second Vice-President—F. E. Lucas, Dominion Iron & Steel Co., Sydney, N.S.
Secretary-Treasurer—H. R. Thompson, Canadian Manufacturers Association, Amherst, N.S.
Executive Committee: Class 1: Mining—A. J. Tonge, Dominion Coal Co., Sydney, N.S.; Class 3: Lumber and Woodworking—Rufus E. Dickie, Stewiacke, N.S.; Class 5: Iron and Steel—R. B. Stewart, Mar. Bridge Co., New Glasgow, N.S.; Class 6: Miscellaneous—Chas. Monaghan, Moirs, Limited, Halifax, N.S.; Class 7: Building Construction—A. S. Curry, Rhodes Curry Co., Ltd., Amherst, N.S.; Class 8: Public Utilities—J. H. Winfield, Maritime Telegraph & Telephone Co., Halifax, N.S.; Class 9: Transportation and Navigation—G. W. C. Hensley, Pickford & Black, Halifax, N.S.

Development of N.S. Water Powers

A Hydro-Electric Commission, along the lines of the system that has obtained in Ontario, is announced as the latest innovation in the programme of the Nova Scotia Government. To this end two Bills, one respecting the development of electric power from water resources and the other respecting water and water courses, were recently introduced in the Provincial Legislature by Attorney-General Daniels. All the water-power resources of the province belong to the Crown, but in order to make the older act conform with the provisions in the new bill, and so make way for the Governor-in-Council, by legislation, to appoint a Hydro-Electric Commission, the bill respecting water and water-courses in the province will have to be passed. The new bill respecting the development of electric power from water power will come up for its first reading immediately after the Easter holidays, and it is the intention of the Attorney-General to explain its provisions and also to review the history of the Hydro-Electric Commission in Ontario.

Development of N.B. Water Powers

Premier Foster introduced a bill, in the New Brunswick Legislature, entitled "An Act for the development of Water Powers of the Province." In explanation of the bill, he said the Government had some time ago appointed a Commission to look into the matter of water powers, and a survey of a number of possible developments had been made. It is the intention to extend the investigation throughout the entire province, and it is hoped in time to learn where all water powers are located, what locality or industry they could serve and what industry they might attract. After these facts had been ascertained the problem would be to develop them along systematic and business-like lines. The Premier stated he was not in favor of municipal or Government construction and operation of water-power plants, as such had not worked out satisfactorily in the past, and he believed that it had been fully demonstrated that development could not be accomplished in a manner as economical and business-like as by a private company. He is in favor of private construction and private operation, assisted financially by the Government in order that securities for such development should be floated and the money obtained at the very lowest possible cost, and which assistance when given, must be given with a measure of control and a goodly share of the profit arising therefrom reverting to the people.

Clause 6 of the bill empowers the Commissioners to declare at any time by order in writing, that it was in the public interests that any water course or any part thereof should become vested in the Crown, and provision is made for proper compensation in that connection.

The bill provides that where any person or corporation should place before the Lieutenant-Governor in Council a concrete business proposition for the development of water power and can satisfy the Lieutenant-Governor in Council as

to the financial ability of the person or corporation, and should it procure a certificate of a hydro-electric engineer of standing approved by the Commission, the Government can assist such person or corporation by guaranteed bonds up to an amount not in excess of three-quarters of the cost of such development.

It is proposed that the company shall be controlled by an issue of stock divided as follows: Forty-nine per cent. remaining in the right and name of the province, forty-nine per cent. in the right and name of the company, and the remaining two per cent. it is proposed shall be placed in the hands of the public utilities commission, to be voted by that body upon any question which might arise between the Government and the company. In this way the Government would retain full control. It is also proposed that the water power commission shall be on the directorate of the company and thereby protect the interests of the province.

The Premier does not claim that the bill, which he presented for the consideration of the Legislature, would guarantee the development of the water powers, but a trial could be made. The provisions are novel and further progress, if any, will be watched with interest.

Labor Demanding Eight-Hour Day

The Nova Scotia Federation of Labor passed a resolution to the Local Government some weeks ago demanding an eight-hour day, forty-four hour week. Following this, a delegation of the Maritime Branch waited on Premier Murray in an endeavor to impress upon him the fact that, if such a measure should become law in Nova Scotia and not in the other provinces, it would tend to act as a disadvantage against the industries of this province, in competition with the industries of the other provinces.

At a late meeting of the Cape Breton labor bodies, a resolution was passed threatening a general strike throughout the province on July 1st if such an Act is not passed to come into effect before that date. It has not yet been decided what further action the employers will take.

Amendments to Workmen's Compensation Acts

The Government has brought in a bill with a number of amendments to the Nova Scotia Compensation Act. The most important change is the addition of "medical aid," the provisions of which are similar to the Ontario Act.

The New Brunswick Government has decided to bring the lumbermen under the Compensation Act. Heretofore the mill operations only have been included, but it is now proposed to bring in the logging operations as well.

Miscellaneous Legislation

The Nova Scotia Government has introduced a bill in the local Legislature entitled "The Fair Rent Act." The bill is intended to control the rents being charged for houses occupied by the working class. A Housing Bill has also been introduced to take advantage of the federal housing grant. A bill entitled "An Act to provide for an enquiry respecting Hours of Labor of Women employed in Industrial Occupations, and other matters relating to such Employment, and respecting Mothers' Pensions or Allowances" has also been introduced in the N.S. Legislature.

A bill to amend, extend and consolidate the New Brunswick Factories Act has been introduced into the N.B. Legislature. The novel feature of this bill is that the Administration of the Act is to be in the hands of the Workmen's Compensation Board.

April Activities of the Toronto Branch

By H. MACDONALD
Secretary, Toronto Branch

THE permanent Standing Committee composed of the C.M.A., G.W.V.A., and other representatives has prosecuted its work along new lines during the past month by formulating a Repatriation Campaign, for the purpose of raising $1,500,000—$400,000 of which it is proposed to devote to the Associations of Veterans. Five club houses are to be built in Toronto, and this undertaking is to be managed by a board of trustees constituted as follows: The Mayor of Toronto, the Finance Commissioner, the Works Commissioner, the Property Commissioner, the City Solicitor, the President of the Board of Trade, the President of the Trades and Labor Council; Chairman, Local Branch, C.M.A.; Chairman of the Repatriation League, and five veterans to be named by the Executive Committee of the Repatriation League.

The plans for the maintenance and internal management and control of the club houses are to be determined by the Executive Committee of the Repatriation League, the club houses being for the benefit of all the veterans in Toronto.

An excellent plan has been to unite with the G.W.V.A., the Repatriation League, the Y.M.C.A. and the Community Service Federation, to conduct a combined campaign for the carrying on of the excellent work of the respective organizations, instead of dissipating their energies by four separate attempts to raise the amounts they each need.

Soldiers' Vocational Training

At a recent conference of the Business Council of the Citizens' Repatriation League with the representatives of the G.W.V.A., the question of uniformity in the practice of employers in paying returned soldiers while under vocational training was considered. The G.W.V.A. representatives advanced the suggestion that during the first six months of training with an industry the amount which the employer is willing to pay should be placed to the credit of the employee and used during the second period of six months in bringing the employee's salary up to the standard for 100 per cent. efficient man, should the employee in question not have reached that standard. The Executive Committee directed that a meeting of manufacturers employing two or more returned men in vocational training should be convened on an early date, with a view to adopting some concerted and uniform practice in the matter.

Iron and Steel Founders

At the request of members of the Association, the Toronto Branch Executive convened a meeting of foundrymen and machine shop owners of Ontario, in the Assembly Hall, Board of Trade, on 7th current, for the purpose of discussing the question of proposed shorter hours and higher rates, in consequence of a new schedule having been presented by the Metal Trades Council. All the proposals advanced received careful consideration, and it was agreed that it was quite impossible under existing conditions to accept. That decision was reached in what was considered to be in the best interests of the industries involved, including both employees and employers and the nation as a whole. The employers have no control over the market, but must bid in keen competition for any business they secure with similar businesses in other

parts of Canada, United States, Great Britain and other countries. It must be clear, therefore, that if our costs are higher than the costs of those in competition with us, we stand small chance of securing such business, and we believe it can be shown that a good deal of business has passed by this community already, because of the present high cost. If this is true, it means that much of the present unemployment is due to high labor costs.

The Employers' Association of Toronto has formulated a reply to the union, on behalf of the employers.

War Memorial

The Toronto Branch Executive at its last meeting considered the question of a War Memorial. It is felt that the efforts of all interests should be concentrated in one War Memorial which will have dignity, beauty and greatness, and be so imposing that it will impress even the casual observer. Co-operation is necessary to prevent indiscriminate expenditure and to adopt a scheme that will be generally acceptable. In view of the importance of the matter, the committee agreed to present it for discussion at the forthcoming Annual Meeting of the Branch on 15th of May.

Postal Clerks' Association

The Toronto Branch Executive, through our Ottawa Office of the Association, presented representations to the Postmaster-General in reference to a threatened strike of the post office employees, and it is gratifying to know that the Department agreed to a conference of the postal employees in Ottawa, when it is hoped all differences will be adjusted.

"Welfare" Work

The committee appointed at a recent conference to report on "Welfare" work visited the factory of Messrs. The Williams, Green & Rome Co., Limited, Kitchener, on April 8.

The committee was much impressed with the architectural features of the factory, while the internal arrangements and staff organization presented a general appearance of order, discipline and efficiency, showing that under the "Welfare" plan worked out by Mr. Williams, the largest possible measure of co-operation between employers and employed was being obtained. A feature of the organization in this factory is the latitude allowed the employees to work out plans on their own account without undue interference by the management.

Notwithstanding that there is a well-equipped library in the town, the factory library is being regularly used and appreciated. While due consideration has been given to the working conditions in the factory, special attention has also been given to facilities for recreation and amusement. A well-equipped kitchen and dining-room has also been provided, in charge of the employees, which has been managed to the entire satisfaction of the directors. An open-air arena on the top of the building is used for recreation and amusement purposes, which is specially appreciated in the heat of summer.

After luncheon, which was served in the employees' dining hall, Mr. Williams welcomed the delegation, referring to the success attained by "Welfare" and stating that any sacrifices already made or to be made, would be repaid tenfold. They were not antagonistic to labor, and they invited other industries to follow the course successfully pursued by themselves. Their factory had been built up by co-operation between employers and employees.

Mr. Roden moved a vote of thanks to Mr. Williams for the reception accorded the delegation. All felt that the factory was permeated by a healthy atmosphere. The employers formerly did not think it was possible to cultivate the now happily existing amicable relations between employers and employees. The present serious situation with which industry is confronted could only be successfully met by co-operation, not only between employers and employees but also between the farmer and the manufacturer, the cause of apparent differences in the past arising from ignorance of each other's problems. Messrs. McIntyre, Monypenny, Harris and Harding also expressed their pleasure at the appearance of harmony prevailing in the factory.

Mr. W. J. Roberts spoke on behalf of the employees, after which Mr. Williams thanked the speakers, stating that while Canadians were now noted as fighters, he would like the manufacturers to be distinguished as pioneers for the betterment of labor.

The committee directed that "Welfare" as the solution of labor unrest, should be made the subject of discussion at the forthcoming Annual General Meeting of the Branch on 15th of May next.

Daylight Saving

At the monthly meeting of the Executive Committee, held on 22nd of April, it was reported that a request by the Branch Executive to the Mayor to publish a proclamation in favor of renewing daylight saving had been promptly adopted by His Worship. It is indisputable that the majority of workers in factories, offices and stores want the extra hour of daylight, and the fact that the railways were intent on adopting the new time, furnished a strong argument for making it general.

Tariff

At a Special Meeting of Toronto Branch Executive, held on 17th current, the following resolution was unanimously adopted:

"That this meeting of the Executive Committee of the Toronto Branch Executive of the Canadian Manufacturers' Association recommend to the Executive Committee that a petition addressed to the Dominion Government opposing any interference with the tariff at the present session of parliament, be sent to all the manufacturers in Canada for signature by their employees—such petition to be transmitted by the manufacturers to respective members of parliament in each Riding for submission to the Acting Premier."

The committee felt that as regards the removal of the special war tariff, members of parliament might safely be left free to exercise their own judgment but that it should be made clear that any parliamentary representative would forfeit the confidence of his constituent, if he voted for any measure that seeks to preserve Union Government by sacrificing the interests of those who have invested their money or who work in Canadian industries.

Royal Ontario Museum of Archæology

The Toronto Branch Executive Committee considered a proposal by a joint committee representing various city organizations to open the Royal Ontario Museum on Sunday afternoons. Many citizens, whose employment engages them six days a week have no opportunity of visiting this institution except on Sunday. Nothing can be more elevating or instructive than an examination of antiquities, treasures and works of art and craft.

The opening of the Royal Ontario Museum on Sunday afternoons will enable every citizen to benefit by it, and it will be of much greater value to the industrial community through its exhibits of the development of various industries and suggestions for designs, etc., particularly during the reconstruction period through which we are passing.

Canada's Participation in the Lyons Fair

The Canadian Section one of the Outstanding Features of the Event—Scope of the Exhibits Made by Canadian Manufacturers—Results of the Exhibition—Some of the Difficulties Encountered and Steps Taken to Clear Them Up

By W. P. HUGHES

Secretary Montreal Branch, C.M.A., and Secretary Grand Committee Canadian Exhibitors



Entrance to the Canadian Section

Sir George E. Foster, Minister of Trade and Customs, may be observed standing in the centre of the picture

CANADA'S bid at the 1919 Foire de Lyon for recognition by European buyers as a producer of peace-time manufactured goods that rival the best to be obtained elsewhere, was a decided credit to the country at large, the Government of Canada, and the fifty-six participating Canadian manufacturers.

Situated in the very heart of the city, occupying a prominent corner in the open square known as "Place Bellecourt," attracting the attention of all who passed with its arches depicting Canadian industrial life, the Canadian section was acknowledged by everyone to be one of the most outstanding features of the fourth great Industrial Fair held in the beautiful City of Lyons, in southern France, during the first two weeks of March, 1919.

The section was made up of 72 booths, 36 on each side of the street that, early in the fair, became known as "L'Avenue Canadienne."

The official Canadian Government exhibits, including those of the National Railways, the Departments of Trade and Commerce, Forestry, Mines and Agriculture, occupied 15 booths in the centre on one side, while the impressive advertisement of the Canadian Pacific Railway was directly opposite, covering the space of 8 booths.

Further deducting the booths occupied as offices by the Canadian Government and the Canadian Manufacturers Association, and that utilized for a most attractive display by the Canadian Red Cross, 46 booths were left in which Canadian manufacturers exhibited their products according to their individual ideas of effectiveness. A neat uniform scheme of decoration proved a serviceable background for most of these displays, though in some cases it was replaced by a more individual decoration designed to show off to better advantage a particular line of goods. The general effect was most noteworthy.

Entering "L'Avenue Canadienne" from one of the main arteries of the city, the buyer first met with the concrete mixers and pumps of the London Concrete Machinery Co., of London, Ont., and probably paused to join for a moment the crowd that seemed never tired of watching the pump from which a continual flow of water fell into a small tank that never filled. The barn equipment of Beatty Bros., Fergus, Ont., and the hoisting engine of the Marsh Engineering Works, Belleville, Ont., would next engage his attention, while farther down the street he would see the asbestos roofing of the Asbestos Mfg. Co., Montreal; the agricultural machinery of the Frost & Wood Co., Ltd., Smiths Falls, Ont.,



Representatives of Canadian Firms at the Big Fair at Lyons

and of the Tudhope-Anderson Co., Ltd., Orillia, Ont., as well as the car wheels of the Canadian Car & Foundry Co., Ltd., Montreal.

If he had come looking for what Canada had to offer in the line of building materials and tools, he found admirably displayed the metal panels and roofing of the Pedlar People, Ltd., Oshawa, and of the Metallic Roofing Co. of Canada, Ltd., Toronto; the asbestos roofing and sheathing of the Asbestos Manufacturing Co., Montreal; the hardwood flooring of the Seaman, Kent Co., Ltd., Toronto; the lumber and lumber products of the Georgian Bay Shook Mills, Ltd., Midland; the sanitary woodenware of the Goderich Organ Co., Ltd., Goderich, Ont.; the wallboard and stucco house models of the Bishopric Wall Board Co., Ltd., Ottawa; the portable house models of W. H. White, Montreal; the electrical supplies of the Duncan Electrical Co., Ltd., Montreal, and of McKinnon Industries, Ltd., St. Catharines, Ont.; the builders' hardware of Taylor-Forbes Co., Ltd., Guelph; Canada Foundries & Forgings, Ltd., Welland, and Richards Wilcox Canadian Co., Ltd., London. If he was looking for house furnishings he found the enamelware of the McClary Mfg. Co., Ltd., London, Ont.; the tinware of the E. T. Wright & Co., Ltd., Hamilton; the stoves and ranges of the Hamilton Stove & Heater Co., Ltd., Hamilton, and McClary Mfg. Co., Ltd., London; the bent wood furniture of the North American Bent Chair Co., Owen Sound, Ont.; the woodenware of the Wm. Cane & Sons, Ltd., Newmarket; the washing machines of Maxwells, Ltd., St. Mary's, and of Beatty Bros., Fergus, Ont.; the sewing machines of the White Sewing Machine Co., Ltd., Guelph; and the pianos and talking machines of the Amherst Pianos, Limited, Amherst, N.S. For interior decorations he might find the beautiful wall paper of Stauntons Ltd., Toronto, and for both interior and exterior work the paints and varnishes of Brandram-Henderson, Ltd., Montreal, and the white lead and lead products of the Pacific White Lead Co., Ltd., Vancouver, B.C. The paint brushes, brooms and whisks of T. S. Sims & Co., Ltd., Fairville, N.B., would also attract his attention in this connection.

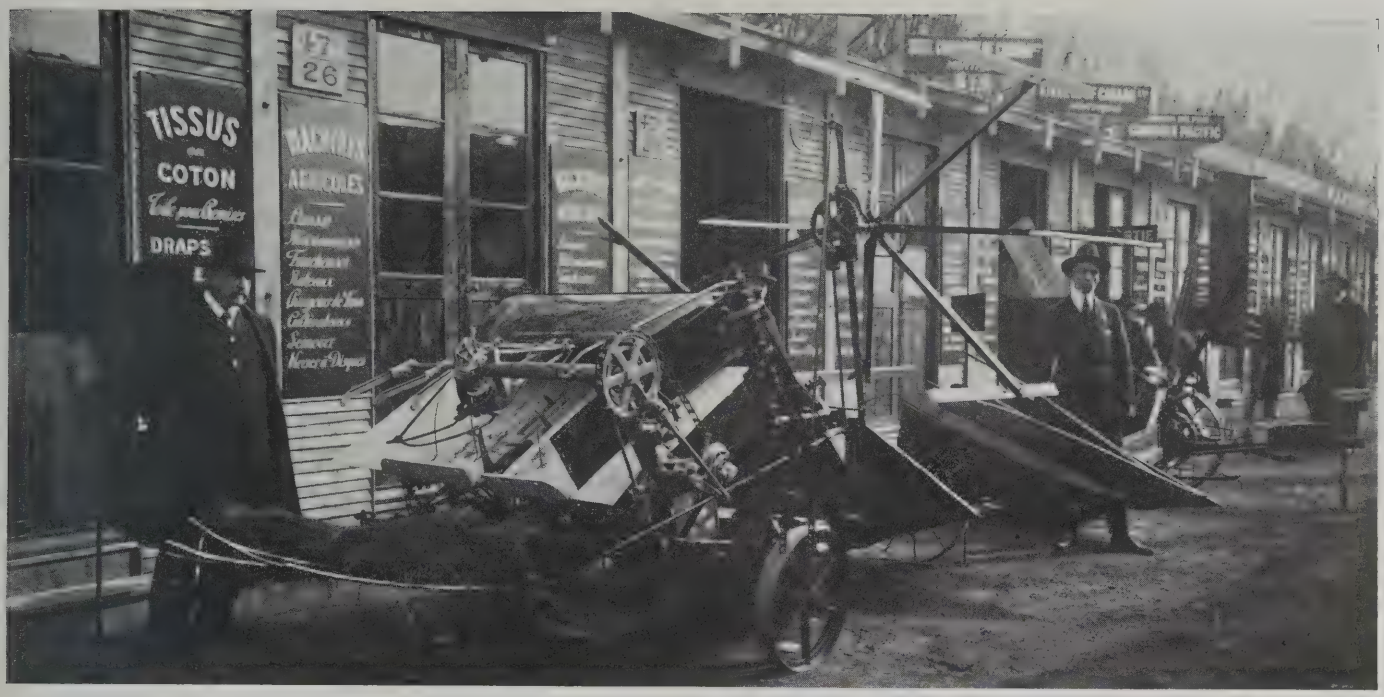
If interested in hand tools and machinery he found the edged tools and hand agricultural implements of the Welland Vale Mfg. Co., Ltd., St. Catharines; the hammers, wrenches, etc., of the Canada Foundries & Forgings, Ltd., Welland; the lawn mowers, tree pruners and post-hole diggers of Taylor Forbes Co., Ltd., Guelph; the farming implements and lawn mowers of Maxwells Ltd., St. Mary's, and the steamfitters and machinists' tools of Pratt & Whitney Co. of Canada, Ltd., Dundas, Ont. If his search was for heavier agricultural machinery, there was in addition to those of the Frost & Wood Co., Ltd., and the Tudhope-Anderson Co., Ltd., already mentioned, the extensive display of the Massey-Harris Co., Ltd., Toronto.

Railway car models and brake beams were on exhibition for him by the Canadian Car & Foundry Co., Ltd., Montreal; iron and steel products by the Steel Co of Canada, Ltd., Montreal; enamelled baths and basins by the Amherst Foundry Co., Ltd., Amherst, N.S.; emery wheels by the Dominion Abrasive Wheels Co., Ltd., New Toronto; electrical wire and cable by the Canada Wire & Cable Co., Ltd., Toronto; chains, saddlery and carriage hardware by the McKinnon Industries, Ltd., St. Catharines; carriages by Carriage Factories, Ltd., Toronto; leather by Beardmore & Co., Ltd., Toronto, industrial alcohol by the Canadian Industrial Alcohol Co., Ltd., Montreal; wood chemical products by the Standard Chemical Iron & Lumber Co., Ltd., Toronto; metal chemical products by the Metals Chemical Ltd., Welland, and wax paper by the British American Wax Paper Co., Ltd., Toronto.

Exhibits of Food Products

If Canadian food products had brought him to the section, there was the condensed milk of the Laing Produce & Storage Co., Ltd., Brockville; the macaroni, canned vegetables, fruits, jellies and jams of the Dominion Canners Co., Hamilton; the canned and dried fish products of the Maritime Fish Corporation, Montreal; and last, but by no means least, there were the chocolate and chocolate products so temptingly offered by Neilsons Ltd., and Willard Chocolates Ltd., both of Toronto.

For clothing and kindred needs he found most attractively set out the fabrics, shirtings, sheetings and longcloths of the Dominion Textile Co., Ltd., Montreal; the boots and shoes of Daoust, Lalonde & Cie., Montreal, and Legacé & Lepiney, Quebec; the rubber goods of the Canadian Consolidated Rubber Co., Ltd., Montreal; the shoe polishes of the Canadian



An Exhibit of Canadian Implements at the Lyons Fair

Shoe Polishes & Findings Co., Ltd., Hamilton, and the shaving brushes of the T. S. Simms & Co., Ltd., Fairville, N.B.

In the Canadian Government booths visitors were shown characteristic scenes along the Government railways, excellent specimens artistically arranged of Canadian fruits, grains and grain products, flax, meats, canned foodstuffs, woods, minerals and panoramic views of Canadian industries, fisheries and cities. In the Canadian Pacific Railway exhibit they were conducted by meaans of cleverly constructed mechanical models, in the light of day, the twilight of evening and of early dawn, past the busy port of Fort William, with trains and boats coming and going and ships loading grain at the elevators, and through the Rocky Mountains, whose majesty and grandeur, so skillfully suggested, never failed to arouse expressions of delight and admiration. Many transparencies depicting views of Canadian cities, industrial plants, C.P.R. hotels and beauty spots in Canada's natural scenery set off in frames of young birch and surrounded by Western grasses completed a most artistic and impressive advertisement to which thousands of visitors flocked during the two weeks of the Fair.

In the Lyons Fair section of the *London Times*, issued on March 22nd, untimo, this statement appears: "The Canadians have had more advertising in France than any other foreign nation." But if this be true (and without exaggeration it can be said that this opinion is but a reflection of an achievement conceded to Canada by all who visited the Fair) it should be noted that the publicity gained by Canada was not born of mere chance, but was the well-earned result of careful plan and hard work. Sir George E. Foster, the Canadian Minister of Trade and Commerce, early laid his plans to this end and energetically carried them through. Sufficient money was made available for making the Canadian section itself attractive and distinctive, moving picture films illustrative of Canadian farm and industrial life were shown without charge to the people in Lyons. A Canadian military band, during the second week, gave daily concerts on a specially-constructed platform just outside "L'Avenue Canadienne." But co-ordinating and making effective these factors of publicity was the work of Sergeant Rankin, to whom Sir George Foster committed the task of keeping the public informed as to Canada's activities at the Fair through the medium of the newspapers. Sergeant Rankin proved to be a most successful Director of Publicity. His bright, interesting descriptions of from-day-to-day developments at the Fair from a Canadian viewpoint were no doubt the immediate cause of much of the prominence that was enjoyed by the Section Canadienne. A conservative estimate of the free space thus secured to Canada in the leading French and British papers was made at the close of the Fair and it totalled some thirty thousand dollars at the ordinary advertising rates. It can safely be said, therefore, that Canada's participation in the 1919 Lyons Fair, viewed as a publicity campaign, was an unqualified success and will lead to great benefits being derived by Canada therefrom.

Little Immediate Business

As a means of securing orders for Canadian manufacturers, however, it must be stated at once that many conditions combined to make the effort unproductive of immediate business, though it would indeed be foolishly shortsighted to measure the business resulting to the participating manufacturers by the actual amount of orders taken during those two weeks. To begin with, economic conditions in Europe, but more especially in France, were as bad as at any time during the war, and this general condition hung like a cloud over the Fair. The absolute necessity that obtained during the war for the continuous importation of a great many different lines of manufactured articles was no longer present, for with the signing of the armistice it became possible and profitable to economize in this respect and this is what France set out to do. It may be true that the uncertainty as to what the exact nature and amount of the financial help for reconstruction purposes to be secured to France as a result of the peace deliberations has had some influence and it may be equally true that a satisfactory settlement may alter the attitude of her Government, but certain it is that the French policy with which Canadian manufacturers at the Lyons Fair found themselves confronted was one of exclusion of the foreigner. Late in January the French Government had enacted most strin-

gent import restrictions which proved to be a barrier hard for foreign exhibitors to overcome. As a consequence Canadian manufacturers were more or less in the regrettable position of being on the ground with goods that in most instances might have found ready sale in large quantities but of being unable to negotiate those sales on account of this wall between buyer and seller. An indication of what would have assuredly been the result under more favorable conditions is afforded in the fact that approximately two million dollars' worth of goods were sold even under conditions as they were. If some workable arrangement can be effected between the French Government and our own, nearly every Canadian manufacturer who was at the Fair will profit by the venture. The possibility of such an arrangement seems to depend very largely on the attitude which the French Government will adopt subsequent to the announcement of the peace terms.

At present the French policy is dictated by two considerations: First, the unfavorable trade balance under which France is laboring and the consequent need of preventing French exchange from falling further by the extension of her indebtedness to foreign countries. Second, the protection of French industry underlying which idea is the attitude, that as it is French territory that has suffered through the invasion, it is only fair that it should be French people who should have the opportunity of making whatever can be made out of the reconstruction work, even though this may entail otherwise unnecessary delays. Whether or not this attitude will be modified by the peace terms remains to be seen, but on the other hand it is perfectly plain that France will have of necessity to call upon the foreigner for a certain quantity of materials and a certain number of tools, and the manner in which this business is to be transacted is also fairly well indicated by present tendencies. This tendency is toward Government control if not by Governmental agencies themselves. One thing seems certain and that is that individual commercial houses in France will be able to do very little in connection with the placing of orders with foreign companies for reconstruction materials. All tools, machinery and constructional materials will remain subject to the granting of import licenses, and these licenses will not, except in rare instances, be granted to private firms. Orders will be lumped and the negotiations carried on by Government or quasi-government commissions. A number of such have already been formed, some representing particular industries or branches of the building trade, and others representing various districts of the devastated areas, and it appears very likely that firms that are allotted building contracts or repair work in the devastated districts will have to apply to these committees for the materials needed from abroad, and that it will only be on their recommendation, and perhaps through their agency if not through their action as purchasing bodies, that such materials will be imported. This will mean business negotiated through Governmental agencies, and it is in this connection that our Canadian Trade Mission will, no doubt, prove most valuable to Canada.

It should not be concluded from what has been said that all or even a majority of the Canadian manufacturers who attended the Lyons Fair regretted their outlay, for, as has already been stated, orders amounting to the sum of two million dollars were booked and most valuable connections, in many instances, were established with buyers from various countries. Quite a number expressed their entire satisfaction at the visible results they attained, while most of them were of the opinion that the eventual business they would secure as a result of the Fair would remove any disappointments attendant upon the Fair itself.

One of the first things that the Canadian representatives did on arrival at Lyons was to organize themselves into a Grand Committee for the consideration of matters in connection with the Fair that might be of common interest. Colonel L. W. Marsh of the Marsh Engineering Works, Ltd., Belleville, was chosen as chairman, and the writer as secretary. Daily meetings were held in the Canadian Manufacturers Association booth, which were constantly attended by most of the exhibitors. Opportunity was thus afforded for the lively discussion of the unfavorable conditions above outlined as well as of many matters in connection with the Fair itself. Concerted action was taken by this body with regard to such questions as the French import restrictions, the obtaining of exact information as to French customs, regulations and prevailing trans-Atlantic freight rates. Provision was also made by it for the entertainment of the ladies who had come with members of the committee, the gathering of information as to regulations governing passports, the distribution of samples, etc., etc. One of the most important steps taken was the appointment of representatives to an all British exhibitors' committee which latter body collected the deliberations of the several smaller groups and submitted a joint statement at the close of the Fair to the Lyons Fair Board of Management. These recommendations dealt with aspects of management which British exhibitors felt could well be improved. The many difficulties under which the 1919 Fair was conducted were fully appreciated, and it was made plain to the Management that the criticisms offered were offered in a spirit of co-operation and with the sole desire to see the Fair as productive of large values as possible.

The principal suggestion thus submitted related to the clear determination of the Fair's status with the French Government as an International Exhibition. This year there



Headquarters of the Canadian Manufacturers Association

The C.M.A. office on the left of the picture adjoined the offices of the Canadian Government and the Canadian National Railways

was an apparent lack of co-operation on the part of the French Government, and many minor difficulties of travel, transportation of freight, customs regulations, etc., etc., as well as the larger questions of French trade policies reflected this fact. Other suggestions took up aspects of internal management such as the unalterable adherence to the advertised dimensions of booths, the completion and furnishing of booths sufficiently in advance of the opening day of the Fair to enable exhibitors to set up their wares and be ready for business on the announced date. The control of prices chargeable by contractors, adequate facilities for the handling of heavy goods, the careful editing of the Official Catalogue and the promptness of its publication, a more energetic propaganda among the buyers of different countries and the supply to exhibitors of an advance notice of buyers who might be expected at the Fair constituted the more important remaining topics of discussion in this report. Two requests of sole interest to British Empire exhibitors were appended to the above. These were that the Fair management should in future provide for an All British Empire Section, in which manufacturers from the different parts of the Empire might gather, and that necessary space in the Official Fair paper be supplied free of charge for the publication in English of notices and other items of general interest to British exhibitors. The Management were given to understand that a permanent British Empire Lyon's Fair Committee was to be shortly formed, with headquarters in London, Eng., and that if the proper spirit of co-operation were shown by the former, the latter body would do all in its power to encourage the attendance of British Empire manufacturers at future Fairs, but it was also hinted that failing this co-operation some other means might be evolved by which British manufacturers could accomplish what was expected by attendance at such a Fair. This British Empire Lyons Fair Committee has since the Fair become a reality and it can be expected to deal with these questions energetically and to be a source of much helpfulness to all British Empire manufacturers who are interested in future Fairs.

Sir George Foster, accompanied by Mr. Lloyd Harris and Hon. Philippe Roy, Canadian General Trade Commissioner in Paris, visited the Canadian section at Lyons on March 12th and 13th. This visit marked the culminating point of Canada's prominence at the Fair. After a booth-to-booth inspection by the Minister and his party, in which the manufacturers were given an opportunity of discussing with him the probable business opportunity thus afforded them by the Fair, a meeting was held which was attended by all and in which Sir George took up the various difficulties under which the exhibitors were laboring. A hearty vote of thanks was tendered him at the close of his remarks which had helped so much to dissipate the dissatisfaction felt by some of the exhibitors.

The Official Banquet

In the evening the official Canadian banquet was held. This function was a marked success. Seldom has Sir George Foster been heard by Canadians to better advantage. Speaking first in French and then in English, his wonted eloquence held his audience's close attention for an hour, and his conclusion was the signal for an outburst of enthusiastic applause. Senator Ed. Herriot, Maire de Lyon, preceded the Minister, in an address which was a gem of oratory. Those Canadians who could understand French heard eloquence the quality of which is passing rare. No account of Canada's participation in the 1919 Foire de Lyon would be complete which did not pay tribute to the great assistance rendered all through the undertaking by the C.P.R. On this side of the water the services of Mr. E. N. Todd, General Freight Agent, in collecting and forwarding the freight to the Atlantic seaboard could not well have been dispensed with. It is a creditable thing that not one piece of the many hundreds composing the exhibits failed to arrive at St. John in time to be forwarded by the special boat which had been arranged for. The passenger agents in Liverpool, London and Paris spared no effort to make the journey of the Canadian representatives pleasant and unhampered. At the Fair itself, Mr. E. R. Bruce, Director of Exhibits for the C.P.R., was given full charge by the Minister of Trade and Commerce of the installation of the Canadian exhibits, and his untiring efforts largely accounted for the successful nature of Canada's showing.

Canada's Implement Industries

Preliminary Census just Completed by the Bureau of Statistics at Ottawa Shows Big Expansion in Two Years

The Dominion Bureau of Statistics has completed a preliminary census of the agricultural implement industry in Canada for the calendar year 1917. The census covered altogether ninety establishments. These were located in the provinces as follows: Alberta, 1; Manitoba, 7; Nova Scotia, 1; Ontario, 56; Prince Edward Island, 1; Quebec, 21; and Saskatchewan, 3.

The total capital invested amounted to $70,493,801, divided as follows: Land, buildings and fixtures, $13,381,463; machinery and tools, $6,140,082; materials on hand, stocks in process, finished products, fuel, etc., $23,127,626; cash, trading and operating accounts and bills receivable, $27,844,630. The total capital invested represents an increase over 1915 of $10,964,710, or of 18.4 per cent.

The total salaries paid in 1917 amounted to $1,329,736, an increase over 1915 of $273,938, or of 25.9 per cent. The total wage payments rose in 1917 to $8,027,036 from $3,125,066 in 1915, or by 156.8 per cent. The average amount paid to wage-earners in 1917 was $838. The total number on salaries in 1917 was 10,131, having risen from 6,737 in 1915. The average number of wage-earners employed monthly in 1917 was 9,563; the least number was 9,003 in September; the greatest number was 10,027 in December. The total number of different individual wage-earners on the payroll in 1917 was 24,895. From a total summary of 10,051 wage rates, it was found that 1,118 were paid from $12 to $15 a week, 4,271 from $15 to $20 a week, 2,033 from $20 to $25 a week, and 1,163 at a rate over $25. The balance were paid at a rate below $12 a week.

The total cost of materials used in 1917 amounted to $15,599,651, being an increase over 1915 of $9,616,451, or of 160.7 per cent., and the total value of products rose from $13,372,506 to $32,364,340, or by 142.0 per cent. The net value of products, or the value added by manufacture, was $16,764,649 in 1917; in 1915 it amounted to $7,389,270. The net value is found by subtracting the total costs of materials used from the total value of products.

Work of the Canadian Mission in London

Functions of the Commission Explained—Some of the Results Already Secured—Recommendations Made by the Commission to Canadian Exporters—A List of Ten Things that Should be Avoided

By R. J. YOUNGE
Secretary, Canadian Mission, London

THE Canadian Mission in London has been established with two special objects in view, namely, (1) To make proper representations to European countries with respect to materials and merchandise that Canada can supply for the purposes of reconstruction, and (2) To increase the interchange of trade between Canada and the other portions of the British Empire.

The first of these objects is being accomplished through direct negotiations with the Governments of France, Belgium, Italy, Roumania, Serbia and Greece, and will eventuate in the supplying of large quantities of Canadian products to these countries against credits to be established by the Canadian people. It may safely be stated that under no other terms or conditions could Canada secure reconstruction orders since competition regulates trade to-day even as in pre-war times; and this plan serves the double purpose of enabling Canada to take her part in satisfying the urgent needs of suffering Europe, as well as helping to sustain the industries of her farms, her mines, her forests and her factories through the very difficult transition period from war to peace.

The second of these objects provides an organization at the centre of the British Empire to which Canadian producers of all kinds may look for advice and assistance in marketing their products within the Empire—and chiefly in the United Kingdom. It also provides a source of information and advice for British business firms who wish to market their products in Canada, or to open up in the Dominion branches for manufacturing or sales.

Immediate Results

How well the Canadian Mission in London has so far performed its functions is evidenced by the following facts: (1) Initial credits have already been arranged by Canada with Belgium, Roumania and Greece; (2) The British Government has removed the import restrictions against shipments of Empire origin, and (3) Hundreds of Canadian organizations and firms can testify to having received practical advice and co-operation which has led to the consummation of business.

Only those who have had the experience of calling upon the Canadian Mission in London can appreciate the enormous demands made upon the organization and the tremendous difficulties under which its officials have been working; while only the officials themselves have any adequate idea of the variety and extent of the problems which come before them for solution. Many Canadian firms seem to have the impression that the Canadian Mission will act as their selling representatives and that to secure orders they have only to forward their catalogues. They forget that whereas war orders were thrust upon them, post-war orders can be secured only against world competition by individual enterprise and effort. A brief survey of the trade situation shows how impossible it would be for the Canadian Mission in London to endeavor to represent or secure orders for individual firms or corporations, but it can be of very great practical value in supplying information to the representatives of these firms or corporations and assisting them in many ways to secure a large volume of trade.

Too much emphasis cannot be laid upon the recommendation made time and again by the Canadian Mission that the leading producers of Canada should take steps to be represented here. In all cases where possible industries should organize and send one representative for the entire group. Where this is impossible, every individual firm having large capacity for export should send its own special representative or appoint a reliable agency to carry on its work. Orders coming to Canada through Government credits may not demand a special sales organization, but all orders received in Europe through normal channels of trade, namely, the importing merchant firms, can be secured only by capable representation against world competition.

Support Your Representative

The traveller or appointed agent deserves hearty support from his Canadian source of supply. Instances are at hand where Canadian firms have appointed more than one "exclusive" agent in this market, thus complicating their own business and, to the disgust of all their "representatives," receiving no whole-hearted service from any of them. Canadians must "play the game" in business as in war, and unless they are thoroughly straightforward they will find that grasping for too much they have lost all.

Other representatives from Canadian firms are handicapped because they have no definite price quotations from their head offices. They are expected apparently to "jockey" both their competitors and their customers in order to obtain the very highest possible prices. Surely this is not a sound foundation principle for export business. It is the duty of the Canadian producer to supply his export representative with a definite price, and, considering the fact that Canada is competing with the world, this price should be the lowest reasonable price at which the producing company desires the business.

The Canadian Mission in London has even been asked by manufacturers in Canada to ascertain competitive prices on classes of business for which Canada is specially well equipped to compete. This does not inspire the confidence we should have in our great and growing industries. When they really want orders, Canadians should quote quickly, and quote their best and lowest price first.

They should also keep their representatives fully informed with regard to ocean tonnage and rates, bearing in mind that all rates on Eastbound traffic are fixed in North America. They should in every case establish an "Export Department," for the special purpose of co-operating in the closest possible way with their overseas representatives. Such close co operation will go a long way to preventing expensive mistakes and making the Export Department a source of satisfaction.

"Don'ts"

The following "Don'ts" may be useful at the present moment to Canadian exporters:

(1) Don't believe that you can't get export business *until* you try.

(2) Don't believe that you can get export business *unless* you try.

(3) Don't expect to make a success of export business without providing a special department in your organization to take care of it.

(4) Don't depend on the Government or the Canadian Mission in London to sell your product. Send or appoint your own representative.

(5) Don't neglect your representative after you have appointed him. Lead him to expect your co-operation as you expect his.

(6) Don't try to appoint more than one agent in any one market without a thorough understanding and co-operation. Enthusiasm goes a long way towards booking business.

(7) Don't expect your representative to "jockey" prices for you. If you want the business give him your best quotation.

(8) Don't permit inferior or imperfect goods to be shipped on export orders. If you do, you will ruin your own prospects for export trade and bring disgrace on Canada.

(9) Don't permit any export shipment to leave your premises without careful inspection of both quality and quantity.

(10) Don't break faith in any way whatsoever with your export customers because the ocean lies between.

The Canadian Trade Commission at Ottawa

By ERNEST B. ROBERTS

AT what stage is the work of the Canadian Trade Commission? The question has an interest for every business man in Canada, because the reply thereto should reflect the present stage of Canada's international trade.

To use a homely term, whose precedence many a business man may recognize, the "preliminary canter" is over and the "line-up for the start" is being made. Up to date a vast amount of preliminary organization has had to be undertaken. Here, as in the earlier efforts of the Canada Food Board, it has been found that examples of war trade bodies in the United States and in Great Britain are of little use as guides. Canada's problem is one for her own solving. Those at the Commission at Ottawa have had to make their own path in post-war trade work, discarding or ignoring after examination most of the partial similarities of other countries, and are to-day satisfied that they can "blaze their own trail," with the independence and courage of our older Canadian pioneers.

It may seem like preaching to the converted to tell business men again that the Commission in Ottawa acts as the Dominion link with the Canadian Mission in London. A somewhat elaborate connection between the two has been established. Cable communication, of course, is not enough; any more than it would be in the case of a buying agency or commission house with a branch in either capital.

The preliminary work has been heavy and complex. This is not the place to tell it, but it may be stated without conceit that every problem so far has been satisfactorily dealt with.

Work Has Grown Rapidly

The Canadian Trade Commission's work has grown surprisingly in the last few weeks. Daily inquiries for information on market openings abroad are a feature of the correspondence, showing a healthy readiness among firms to take up a new field of activity made apparent by the Canadian example in munition-making and other war work. Their spirit and enterprise could not be improved. The Commission acts as a clearing house for such information, working hand in hand with the Canadian Mission in London, and receiving cable and mail news from several other sources.

A second class of inquiry relates to the changes, complex in their rapidity, in British and foreign restrictions by the war to peace transition regulations. To meet these difficulties a handbook setting forth existing conditions in over fifty British and foreign countries has been compiled. It is intended primarily for exporters and merchants who request it. Each of the self-governing British dominions and colonies had to be dealt with as a separate country. Many neutral countries come under regulations, due to the measures taken by the Allied Governments.

Prospects for export trade are now rosy. The announcement of a British preference to Empire-made goods promises a fillip to trade and commerce, and agreements with foreign countries are in a satisfactory stage. That between the Canadian and the Rumanian Governments for the allocation of the $25,000,000 credit is already in Ottawa; Grecian and Belgian agreements, each for $25,000,000, have been signed and are expected on this side shortly, while a French credit of the same amount is pending, and an Italian credit is under consideration.

It is plain to the Commission that the whole world has been waiting the signing of the peace treaty. The purse strings of every nation are being held tight until then, but there must come a vast expansion of general trade immediately that treaty will go into the files of history. The uncertainty and hesitation of manufacturers and merchants should cease in the recognition that for almost five years the productive nations of the world have been wasting their resources in the air, for that is the net result of war.

Efforts Anticipate Needs

It would be idle to imagine that the arrears of four years' work and the repairs which are necessary throughout the world in industrial plants and in everything which touches business and domestic life will not have to be made good. There may come such a flood of industrial activity as may equal that which marked the opening stages of the war. The only question is how many more months this may be delayed. Until the answer to that question can be given, the efforts of the Trade Commission must be directed largely to intelligent anticipation of what trade needs and conditions then may be.

It is the belief of the Commission's advisers that no immediate drop in general prices can take place in Canada yet. The Commission is doing everything possible to urge the stabilization of prices. This, it is hoped, will restore confidence in the domestic market at least. Wherever possible, the Commission suggests that it would be wise to undertake our buying within the Dominion now, and at present prices. It is known that retail stocks are low, and that large numbers of merchants are holding off in the hope that there will be a general slump. The same is true of many manufacturers, large and small. This means that they are accentuating, unconsciously perhaps, the evils which they hope to avoid, and are in the meantime inducing a certain amount of unemployment. This is short-sighted, because it will mean the migration to a greater or less extent of labor from the point where there is a lack of employment, and so a scarcity of labor there, with the consequent possibilty of increased wages to be paid when activity returns—perhaps sooner than is expected.

Among the ways taken by the Trade Commission to stimulate trade within the Dominion by the encouragement of immediate buying, the following may be an example which illustrates the method rather than the aim. Returns have

been secured of certain foodstuffs now offering at prices favorable to buyers, and from the returns already made it appears that Atlantic fish merchants are able to fill large orders for herring, cod and sardines, on good terms to buyers, and that British Columbian merchants have a considerable quantity of chum and salmon. Wheat flour, oatmeal, rolled oats, desiccated vegetables and beans are among the foodstuffs which the Commission finds are held in large quanties and which could be released at what, looking to the future, seems to indicate remarkably good prices to the buyer. It is perhaps interesting to know that there are two and a half million bushels of beans in the country, though before the war Canada regularly imported large stocks.

Practically the whole field of trade is covered by the Commission, the division of work, for the present at least, being between agricultural and industrial production. A large amount of informative work for the public, it is realized, will have to be undertaken, but with the goodwill and assistance of Canadian manufacturers and producers, there is no reason why the Canadian Trade Commission should not be as successful in the net result as was the Canada Food Board in conditions which were quite as singular and unprecedented.

Work of the Canadian Reconstruction Association

By Sir JOHN WILLISON
President, Canadian Reconstruction Association

TO stimulate production, encourage final processes of manufacture and ensure employment at fair wages for Canadian workers, the Canadian Reconstruction Association, at its executive meeting at Montreal, on April 25, decided to conduct an extensive poster advertising campaign for development of the home market. The plans, as approved, contemplate not only the utilization of large billboard posters in cities and towns in the country, but direct appeals to employees in industrial concerns throughout the Dominion.

Satisfactory progress was reported by the Eastern, Central and Western Committees, and a comprehensive summary of activities was presented to the members. Mr. S. Roy Weaver, head of our Investigation Department, has gone to Chicago to attend the three-days' session of the sixth National Foreign Trade Convention. This convention was called by the National Foreign Trade Council, and its theme is "Foreign Trade Essential to American Industry." Addresses are to be given by some of the leading public men and bankers of the United States, and also by high officials of the United States Government. From Chicago, Mr. Weaver will go to St. Louis, where he will attend the seventh annual meeting of the Chamber of Commerce of the United States, held on April 29, 30, and May 1. He will then attend the sessions of the Academy of Political and Social Science, and before returning will visit Washington where he will spend several days inquiring into reconstruction measures under consideration by the various Government departments.

Reasons for Optimism

There is every reason for industrial optimism in Canada. Already, through the extension of Government credits, new export markets are being opened up in Europe. Credits of $25,000,000 have been established with Roumania, Greece, and Belgium, and further credits are anticipated with France, Italy and Serbia. In addition, a $50,000,000 credit for Canadian lumber has been established with the British Government. Representatives of Canadian industrial groups, cooperating in many instances with the London Trade Mission, have also secured large independent orders abroad, and the country is facing an export trade new in its history. The Pacific coast, watching the industrial revolution in Japan, looks for greatly increased trade with the Orient. The removal of British import restrictions against Canada promises an Imperial trade through Imperial preference which may surpass all expectations. There is a prospect of increased trade with the British West Indies, and extension of trade with South America is anticipated from the establishment of a steamship line between Canada and South America with Sydney, Halifax, St. John and Montreal as the Canadian ports of the service. For the moment, plans for closer commercial relations with Siberia cannot be realized, but there is every promise for extensive future development.

Resources of the West

With such great export prospects, there is also a domestic industrial revival. The country is studying its natural resources as never before and is concerned to determine their exact nature and to ensure their economic and scientific development. Representatives of Western constituencies at Ottawa have organized a Natural Resources Committee which will probably develop into a permanent body. Manitoba and Alberta are investigating their resources and stimulating industrial growth. Throughout the Maritime Provinces development of water-powers, of the fisheries, of the great coal areas, and similar problems are commanding the attention of provincial Governments and public bodies. There is a spirit of confidence and an assurance of development throughout the great mining areas of New Ontario.

With such prospects of domestic and foreign trade extension, industrial optimism is indeed justified, but if Canadian manufacturers are faced with great opportunities they have also specific obligations. In both home and distant markets, it is imperative that Canadian products should be of high quality and that orders and specifications should be observed to the letter. In a recent bulletin to its members, the Canadian Reconstruction Association, after acknowledging the splendid work being done by the Government trade bodies in the establishment of foreign credits for the purchase of Canadian products, emphasized the fact that such purchases are dependent solely upon the ability of Canadian farmers and manufacturers to supply the character and quality of products desired. "Canadian products sent in reply to foreign demand must be of a quality that will fulfill all specifications and give to Canadian products abroad such a reputation that the guarantee of Made in Canada will be a guarantee of quality. Care in manufacture, care in shipment, delivery by specification—these are vital considerations which will determine not only the fate of the credits already established by the Canadian Trade Mission, but the future of Canadian foreign trade in new and distant markets."

Science and Research in Reconstruction

To Carry on the War Itself Called for the Intensive Application of Science to Scientific Discovery and Invention—To-day it is a Question of Seeing that not only War but Life Itself is One Perpetual Emergency

By THOMAS RODEN
Chairman Toronto Branch, C.M.A.

THE immediate prospect of the end of the war has brought to the people of the civilized world, and to none more than to the people of Canada, a realization of the fact that the old order of things must be amended and in a great measure replaced by the establishment of a new order in which the basis and foundation of trade, manufacture, business and affairs must be reconstructed. In this reconstruction the advancement of science and its employment in all the business and affairs of life seems to occupy the first place. The necessities and deficiencies which the war has demonstrated have made imperative calls upon the learning, ingenuity, intelligence and industry of all scientists and workers in science and industrial study and research, with the consequence that there can be no stopping place; the progress which the war has shown to be requisite must be maintained. The people of Canada must make provision and provide means in their schemes for reconstruction which will ensure the maintenance of that progress. It is necessary to bring all who take the welfare of the country to heart to a proper understanding of this position.

Whether we know it or not all advance is a result of accumulated knowledge, that is, of science, and its intensive pursuit and application alone will enable us usefully to meet the problems of the immediate future.

The Meaning of Science and Research

When the people of Canada stop to appreciate and understand the unparalleled advances that in our own days have taken place in physics, biology, chemistry, applied mechanics, science as applied to industry, economics and sociology, the supreme importance of scientific study must necessarily be realized. The Rt. Hon. A. J. Balfour, one of the greatest and most advanced thinkers of the day, said, before the war: "Science is the great instrument of social change, all the greater because its object is not change but knowledge, and its silent appropriation of this dominant function, amid the din of political and religious strife, is the most vital of all the revolutions which have marked the development of modern civilization. It has practically transformed human life to such an extent that the experience of man and woman to-day is something radically different from what it has ever been before."

The war has added emphasis to this expression of his thought.

It is common knowledge to all who will learn that the United States has long since developed within itself a means of doing its manufacturing and trade in a great degree by large trade combinations such as in Canada we have not yet been able to rival. These combinations long since learned the necessity for applying the discoveries of science and scientific research to the betterment of their processes—the saving and utilization of by-products and waste, and the investigation of materials and processes for new products and new means of more economically producing products already known.

Nature has given us great resources in Canada and we do not know how to use them. Though we may be far behind the industrial nations of Europe, we have the future before us. How are we to meet these and other problems? We are to follow the men who observe and men of experience who know.

Self Preservation—National Efficiency

By the war's action in bringing about an absolute cessation of the exports the world was accustomed to receive from Germany, the world very soon realized the deficiencies in production and absence of scientific knowledge required to furnish many necessities, not alone in the trades, commerce, arts and manufactures, but in medicine and all the affairs of life. It was absolutely necessary to set to in hot haste to supply at home what could not be got from abroad, and the wants in this connection are not yet supplied nor the necessary discoveries by any means attained. To carry on the war itself called for the intensive application of science to scientific discovery and invention in medicine, chemistry, biology and in all agencies required for the furnishing of necessary munitions and weapons. To supply these necessities the utmost ability of the scientist and the scientific research enthusiast and the student of applied science was commandeered, with the success we all know of. The war fired the imagination. Here was an emergency that got home to all mankind. To-day it is a question of seeing that not only war but life itself is one perpetual emergency—and that the emergencies of to-day, like those of yesterday, are both profound emergencies and common emergencies.

The common health of the people brings us face to face with the unseen agencies that threaten our very existence, while the foundry, the mine and the blast furnace present processes which so often go wrong and baffle the most competent of experts. Every science is simply the attempt to know some phase of nature presenting its most perplexing complications in the ordinary course of life, progress, and industry.

Concentration of Effort

The universities and technical and other educational agencies are preparing and sending men into the field of research as rapidly as possible, but all too slowly in view of what is required. These men, when educated, must be furnished by the public with every available aid and encouragement. This aid is beyond the competency of any private agency. The work means little pecuniary reward to the worker outside of exceptional cases.

Hitherto there has been no concentration of effort in research nor in the means provided for its pursuit.

This experience has demonstrated conclusively that the attainment of efficiency in all the practical affairs and operations of life has become imperative for the safety and progress of every people. Inefficiency is now out of date—to stand still in these matters is suicidal—energetic action is insistently called for. The more aggressive it can be made the better. It rests with the public to provide every means and assistance for a work of such moment and of such incalculable value to the people of Canada, if not to the whole human race. All civilized people are awake more or less to

these conditions. The logical and inevitable result will be that the country would, by the efficiency of its science and research, approach the best and cheapest means of production and give results from the exploration of new fields, while thus protecting its trade from outsiders, may by the superior efficiency alone hope to foster and advance its commerce with other countries.

Canada Being Awakened

The campaign launched in 1913-14 by the Royal Canadian Institute in development of its great objective to arouse Canadians to a sense of the importance of scientific and industrial study and research commenced the waking-up of the Canadian people. This campaign has ever since been in active operation by publications and addresses, and by the lecture at the public meetings of the Institute, and all other available means, to spread this knowledge among the people everywhere in Canada.

In this vital movement the Institute has benefited by the counsel and assistance of the late Sir Sandford Fleming, and of many of the leaders in Great Britain and the United States, and its carefully matured plans have been approved by the University of Toronto, by each of the banks having its head office in Toronto, by the Toronto Board of Trade, the Manufacturers' Association (Toronto Branch), and by all the important technical organizations in Western Ontario.

The Dominion Government has since realized its responsibilities to the extent of constituting "An Advisory Council of Scientific and Industrial Research," which, after two years existence, has about got into its stride and is doing good work in holding out rewards for success in research and in suggesting means for its practical pursuit, as well as working with the universities in the preparation of students for research and in doing the pure science work of research. It is now the duty of the manufacturers to aid by every means possible, financial and political, the objects and work of the Advisory Council.

Canada's Pressing Needs

Canada stands, in a sense, absolutely naked of any institutions by which the great mass of industries can be helped to meet the expert and efficient productions of the United States and Great Britain. We lack standards, except such as may be recognized in the products of certain manufacturers. We have no scientific libraries accessible to our work and worthy of the name and of our country. Therefore, with no laboratories or libraries, we must press for the consideration and attention of this most important and urgent situation.

Determined Fire Prevention Legislation

Amendment to the Criminal Code Drafted—Negligence to be Punished by Imprisonment — Elimination of Fire Hazards Made Compulsory

IT has, for many years been advocated, by those interested in fire prevention, that legislation should be enacted in Canada whereby negligence in allowing fires to occur should be made a punishable offence. Since it is conceded that the vast majority of fires are due to preventable causes, it has appeared obvious that the appalling fire waste in this country would never be appreciably lessened until some steps were taken to remedy the carelessness which has made it so large. An amendment to the Criminal Code has now been drafted which constitutes a great stride forward in fire prevention legislation and which should be attended by speedy and valuable results. The amendment is as follows:

The Draft Amendment

1. Section five hundred and fifteen of the Criminal Code is amended by inserting the following subsection immediately before subsection two thereof:—

"(1A). Every one is guilty of an indictable offence and liable to two years' imprisonment who by negligence causes any fire which occasions loss of life or loss of property.

"The person owning, occupying or controlling the premises in which such a fire occurs, or on which such fire originates, shall be deemed to have caused the fire through negligence if such person has failed to obey the requirements of any law intended to prevent fires or which requires apparatus for the extinguishment of fires or to facilitate the escape of persons in the event of fire, if the jury finds that such fire, or the loss of life, or the whole or any substantial portion of the loss of property, would not have occurred if such law had been complied with."

2. The said Act is further amended by inserting immediately after section five hundred and fifteen the following section:—

"(515A). In any case where any fire insurance company which carries any policy of fire insurance on the property, or any Dominion, provincial or municipal fire officer or authority recommends that the owner, lessee or other person controlling or operating any building, structure, factory, shipyard, vessel, dock, wharf, pier, sawmill, or yard in which logs or lumber are stored or held, should make any change or alteration in such building, structure, factory, shipyard, vessel, dock, wharf, sawmill, pier or yard, remove any material therefrom, or supply any apparatus therefor, with a view to reducing the risk of fire or for the extinguishing of fire, and such recommendation is approved by any officer in the service of His Majesty, thereto authorized by the Governor in Council, and notice of such recommendation and of such approval thereof has been served personally upon or forwarded by registered mail to such owner, lessee or other person, and such owner, lessee or other person refuses or neglects to forthwith carry out such recommendation, such owner, lessee or other person shall be liable upon summary conviction to a fine not exceeding one thousand dollars, or to imprisonment for any term not exceeding six months, or to both fine and imprisonment."

A Drastic Regulation

The second section of the amendment is even more drastic than the first, although at first sight it may not appear so. Under this paragraph it would be within the right of the "Officer in the service of His Majesty" to compel the owner of a very hazardous business to instal a sprinkler equipment in his plant. Such legislation is similar to that which exists in New York, where the City Fire Commissioner has the power to compel the installation of sprinklers in the case of risks which, in his opinion, endanger the surrounding buildings. A great deal will necessarily depend on the knowledge and experience of the official to whom such wide powers are delegated. Provided the new is interpreted wisely and carefully, it can hardly result in anything but good.

Canada's Big Repatriation Machine at Work

An Explanatory Article Describing the Functions of the Various Departments and Committees which have been Formed for the Purpose of Expediting the Return of Canada's Soldiers to Civil Life—How They are Related to Each Other and the Whole

By W. G. CATES

THE two R's, Repatriation and Reconstruction, are on everybody's lips. For the present they dominate our whole national life and policy. Repatriation means the receiving of the returned soldiers back into civil life and the fitting of them into its social and industrial activities, under at least as good, and, in the majority of cases it is hoped better, conditions than those which they left when they donned the khaki. Reconstruction means the speeding up of the nation's industrial and commercial life to something like its normal peace times' pace. In its wider sense it means also the reshaping, to some extent, of industrial and social conditions to meet the world-wide social changes produced by the war.

Canada, which during the war surprised both herself and the world generally by her military and industrial operations, is tackling the problems of Repatriation and Reconstruction with all the aggressiveness that characterized her efforts while the fighting raged. She can do this work satisfactorily because she has for years been doing work of a very similar nature. Her experience has been gained in the receiving and settling of the tens of thousands who, annually, before the war, came to this country from abroad. Much of that work left considerable to be desired; still, all things considered, it was fairly well done. But Canada will perform in an infinitely better manner the task she now has in hand, having for this special purpose ample and efficient machinery.

Of failure there should be no thought. The country that, with very indifferent means, could take in over 2,500,000 immigrants, as Canada did between 1897 and 1917, should not, find it an insuperable task to take back into civilian life between 500,000 and 600,000 men, a large percentage of whom will automatically return to their old positions. Of the 418,000 who went overseas, 50 per cent. have already returned and there is comparatively little unemployment.

Repatriation Comes First

Repatriation naturally receives first consideration, for the first steps in this work are taken when the men begin to make preparations for their return to this country. As there are many phases in this process, several departments of the Dominion Government, from the time that the soldiers began to return home, assumed a large measure of responsibility for the work. These were the departments of Militia and Defence, Interior, Agriculture, Immigration and Colonization, Labor, and the Department of Soldiers' Civil Re-establishment. Then the provincial governments, possessing large powers and large revenues, were naturally looked to by the men and have readily recognized their responsibility. Finally, the general public has had a vital interest in the matter, for it has been clearly recognized from the beginning that the repatriation of the returned men is a work for people individually quite as much as for governments, and that recognition of this fact is absolutely necessary to success.

With so many agencies working with a common purpose, it was inevitable that, unless their efforts from the first were co-related, there would be overlapping, and there was. The necessity of reducing this to the minimum was recognized and so, during November, 1918, the Repatriation Committee was appointed. This is a sub-committee of the Cabinet, consisting of the ministers of the six departments directly interested: Sir Jas. Lougheed, Hon. J. A. Calder, Hon. Arthur Meighen, Hon. N. W. Rowell, Hon. T. A. Crerar, and Hon. Gideon Robertson. Hon. J. A. Calder was appointed Chairman, H. J. Daly, Director of Repatriation, and Vincent Massey, Assistant Director. The work of the committee is to co-ordinate the various departments of the Dominion Government that deal with the returned soldier problem; to link these up with the provincial governments and organizations in the country that are willing to help solve the returned soldier problem. To a considerable extent it also acts as a mouthpiece for all, doing very largely the work of publicity and renders important service through acting in an advisory capacity. It is assisted by four advisory councils, The Great War Veterans, The Labor Advisory Committee, the Woman's Advisory Committee, and the Advisory Committee from the Union of Canadian Municipalities, through which the co-operation of municipal bodies is very largely secured. In short, this committee has introduced team-work into the Repatriation Movement.

Work of Various Departments

To the Department of Militia and Defence falls the actual work of demobilization; it, in conjunction with the Overseas Minister and Sir Arthur Currie, having worked out the plans. It has control of the men until they are discharged at the dispersal stations.

The Department of Soldiers' Civil Re-establishment takes up the work where the Militia Department leaves off, being charged with the responsibility for the men's welfare until they are fully re-established in civil life.

The Department of the Interior administers the Land Settlement feature of the Government's plan.

The Department of Labor supplies much of the machinery for the securing of employment for the returned men and supervises and largely directs this work.

The Department of Agriculture, being greatly interested in the effort to start so many men on the way of successful farming, lends its assistance in every way possible.

The Department of Immigration and Colonization brings home the dependents of the returning men.

The work of the Department of Soldiers' Civil Re-establishment is one of very great magnitude. To date $20,000,000 have been spent on it, the expenditure during 1918 being $12,000,000. The estimated expenditure for this year is $23,000,000. The departmental staff numbers 2,450. Broadly speaking, the activities of the Department are of a two-fold character. It looks after the invalided and disabled soldiers and assumes responsibility for the returned men until they finally take their place in settled civil life. But the Department does not wait until the men come across. As soon as the Armistice was signed, a representative was sent overseas with a questionnaire, in which the men were asked to state the name of the community to which they desired to

return, the kind of work they had formerly done and what they would like to engage in.

The leading branches of the Department are: Information and Services, Medical Services, Orthopedic and Surgical Appliances, and Vocational Training. First, the Information and Services branch, which, at the dispersal stations, takes charge of the men who are physically fit and are about to return to peace-time activities. For purposes of organization the Dominion is divided into 11 units, corresponding to the 11 military units, there being an officer in charge of each. At each dispersal station is an official to supply information, who passes the men on to the Provincial Returned Soldiers' Commission, which is a sub-committee of the Soldiers Civil Re-establishment Department in its particular province. If employment is desired, the returned man is directed to the nearest employment office, in which an official of the Department is to be found, and who is charged with the responsibility of assisting returned men to get suitable work.

The Provincial Returned Soldiers' Commissions are a kind of supporting organization to the governmental machinery, supplying the link between the government and the public in welcoming the soldier and getting him settled. As soon as a transport arrives at a disembarkation port, a list of the men booked for the district covered by one of these Commissions is wired to its head office, which, in turn, advises the relatives, and in this way arrangements are made for the local homecoming. Branches of these Commissions exist in all communities of any importance.

The care of wounded men, of whom at the end of 1918 there were 42,000 in Great Britain and France, is a big problem. They are brought home in hospital ships in charge of the Army Medical Corps, and sent to the various military hospitals throughout the Dominion, and there treated until cured, or until their condition is such as to demonstrate that they require permanent treatment. In the latter case they are taken in charge by the Medical Services branch. By the end of March over 6,000 patients had passed through the 39 institutions controlled by the Department. If a soldier has lost a limb he is not only provided with an artificial one, but is entitled to have all necessary repairs made to it during his lifetime. A Government factory, in which men fitted with artificial limbs and other similar appliances are employed, is also operated.

Work of Vocational Training

Two classes of work are carried on by the Vocational Training branch, i.e., Occupational Therapy and Industrial Retraining. The first is training in light work, the general purpose of which is to advance the treatment of hospital patients and, in this form of treatment, Canada easily leads the world. Other work is entered upon as the patient progresses. When a soldier has been so disabled as to be unfitted for his former occupation, he is given an opportunity to take a Vocational Training course, designed to fit him for new duties. His case is first passed on by a Disabled Soldiers' Training Board, which endeavors to direct him wisely. While taking his course the man draws pay and allowances for himself and dependents, if any. The courses are very varied and thorough, no less than 177 trades being taught. The best of equipment has been placed at the disposal of the Department in universities and other educational institutions, as well as in large industrial plants, throughout the Dominion. In the early part of February 2,569 men had been graduated, and 2,109 were taking courses; while over 7,000 more had been passed for training. It is worth noting that Canada provides Vocational Training for all disabled men. In the United States before a disabled soldier gets it he must first be in receipt of compensation from the War Risk Insurance Bureau. Up to March 22nd only 3,635 American soldiers were receiving special training of this kind.

The Pensions Board, which is attached to the Department of Soldiers' Civil Re-establishment, now has 60,000 names on its books, the payments for pensions during the present year being estimated at $30,000,000. The pension, which is based on disability, implying decreased earning power, varies with the extent of the disability, a totally disabled Canadian soldier or seaman of the lowest rank getting $600 a year, with $96 additional for each child, girls up to 17, boys 16 years of age. Widows of pensioners are entitled to pensions as long as they do not marry again.

It is estimated that Canada this year will pay nearly $120,000,000 in War Service gratuities. Of this amount nearly $25,000,000 has already been paid out. A gratuity of this kind is a continuation of a man's pay, field allowance and separation allowance for a given period beyond his discharge, the maximum time being placed at 183 days. It varies according to rank and length of service and according as service has been in Canada or overseas. It is believed that these gratuities are as high as any, if not the highest, paid by any country to its soldiers and sailors.

Finding Employment

The problem of finding employment for returned soldiers is being handled by a chain of Dominion and Provincial employment offices stretched across the Dominion, organized on a given standard and receiving uniform direction; these, in turn, being supplemented by local advisory committees of employers and employees; while, standing behind all this, is the extensive and efficient machinery of the Labor Department. By a joint arrangement between the Dominion and Provincial Governments, the latter, save in the Maritime Provinces, have undertaken to open employment offices in the various provinces, the Dominion paying one-half of the expense and providing for standardization of methods. In each of these a S.C.R. official is found. In order that all matters relating to the securing of employment might centre in these offices, it was understood that all private employment bureaux should be abolished. In each province there is a provincial clearing house, to which all offices report daily. The connecting link between the provinces is supplied by the Labor Department, which has clearing houses at Winnipeg, Ottawa and Halifax. In this way the exact conditions of the labor situation are always known to the Department. Supplementing these are reports of field agents, who keep closely in touch with the leading industries, as well as reports from employers and labor unions, which enable the Department to tell accurately at any given time where workmen may be placed to advantage.

The wives and children of the soldiers overseas are now being brought home to Canada by the Department of Immigration and Colonization. Recently it was also decided to transport them at the public expense. About 22,000 of them had arrived before the Armistice was signed, and it is believed that over 40,000 have still to come. It is expected that from now on they will be returned at the rate of about 6,000 a month. In addition to the service rendered by the Department, the Canadian Patriotic Fund, Red Cross and Repatriation Committee, to say nothing of scores of smaller organizations, also help greatly, nothing being left undone to make welcome either the returning ones, or the new arrivals in Canada, for thousands of Canadian soldiers married overseas.

The work of the Soldier Settlement Board is extremely important, because of the possibilities which it presents for a permanent and happy solution of the returned soldier problem. It is important for the further reason that, if what it offers is very generally taken advantage of, it will involve

the outlay of many millions of public money in the form of advances, which, of course, will come back during a period of twenty-five years. By the new provisions of the Soldier Settlement Act, a soldier may now secure advances for the purchase of land, implements, live stock, etc., up to $7,500. Putting at $5,000 the average advance to the man who buys land, then if 10,000 men should take advantage of this arrangement, the outlay would be $50,000,000. This year the estimated expenditure is $25,000,000. However, it remains to be seen whether resort to the purchase of land will be as necessary as seemed probable a year ago. This is a matter for Chairman W. J. Black and his two colleagues on the Board, Major E. J. Ashton and S. Maber, to settle. From present indications, by the end of the year over 25,000 applications will have been filed by men desiring to take advantage of the benefits offered.

There has been a great deal of uncertainty over the question of the amount of suitable Dominion lands available in the prairie provinces. Nor can it be said that the actual facts of the situation have, in this respect, yet been ascertained. When the problem of the returned men first came up, the natural thought was to supply them with homesteads. By this means thousands of veterans of the American Civil War had been provided for, and it was hastily concluded that this could be repeated in Canada. But it did not occur to some that much of the available land is situated some distance from a line of railway. When two years ago the Soldier Settlement Board came to look for the land the report was that it could not be found in anything like the area required, and within easy reach of transportation facilities. This brought about, to some extent, the reshaping of the land settlement policy, provision being made for the purchase of land by the Board, and the selling of it to the men on long term payments. In the meantime considerable more suitable homestead land has, during recent months, been found, and it is quite possible that certain suitable forest, grazing and Indian reserves may be thrown open. In so far as the latter are concerned, action would depend upon the effecting of a satisfactory settlement with the Indians. However, if all those who have signified their intention of going on land should do so, then the Government will have a big task on its hands; for out of 124,000 members of the Expeditionary Force questioned, 104,545 replied, "the land for us."

Who May Get Benefits

The benefits of the Soldier Settlement plan are open to:—

1. Any member of the naval or military expedition army forces of Canada, the United Kingdom or any of the self-governing British Dominions or Colonies during the present war who served in an actual theatre of war, or who left the country in which he enlisted and who has left the Forces with an honorable record. Service in the United States or Bermuda is deemed to be service in Canada.
2. Any British subject resident in Canada before the war who has been engaged in active service in an actual theatre of war in the naval or military forces of any of His Majesty's Allies in the present war, and who has left the Forces with an honorable record.
3. The widow of any such person described above who dies on active service.
4. In the case of the Canadian Expeditionary Force, any person who served in Canada only and received pensionable injury or disability due to service, or the widow of any member of the C.E.F., who died while a member of such Force before leaving Canada.

The Soldier Settlement Board is prepared to give every person coming within the provisions of the Act a fair opportunity to make good on land; but it does require that every person who gets this opportunity shall give evidence of being able to make good. For this reason five distinct lines of policy are recognized:—(*a*) To settle only those who will do best by engaging in farming; (*b*) To settle persons only on land where a first-class home may be made, where farming will be profitable and the location generally suitable; (*c*) Settlement to be not distant from a railway, or an organized community, in the West the maximum distance not being more than fifteen miles and in the older provinces, eight miles; (*d*) By special arrangements, to enable settlers to secure the best possible value in buying live stock, implements and other necessaries; (*e*) To assist settlers in their activities so as to ensure success.

Kinds of Land Available

Three classes of land are available to returned men through the Soldier Settlement Board: (*a*) Dominion Crown lands; (*b*) Privately owned lands in any province that may be acquired by the Board through purchase. As has already been said, it is uncertain how much Dominion Crown land of good quality there is within easy reach of a railway. Some Provincial Crown land is available, but it is not the intention to locate men in districts where good roads are not assured. Quite a number of persons have offered land to the Government on reasonable terms. When such offers are received they are classified according to counties and districts. As they are passed upon by municipal officers, also officers of the Great War Veterans' Association in the respective districts, passed on again by the provincial Advisory Loan Committee, and by other G.W.V.A. officials before being thrown open to returned men, it is obvious that the interests of the prospective settler are safeguarded. When a selection is made the land is then looked over by a capable land inspector. On such transactions no commissions are allowed.

The settler who, under the provisions of the Act, takes up a homestead, is entitled to free entry for not more than 160 acres of land in addition to his ordinary civilian right of homestead entry.

Under the old Act the settler on Dominion lands may borrow an amount not exceeding $2,500 for acquiring land or discharging encumbrances on land; for improvement of agricultural land; for the erection of farm buildings; the purchase of stock, machinery and equipment, or for such other purposes as the Board may approve. The amount of loan would be proportionate to the security of the land. The amount repayable in twenty years. Under Order-in-Council he may now, in addition to this assistance, purchase from the Board live stock up to $1,000, provided his total borrowings do not exceed $3,000. The amount is repayable in four equal annual instalments, commencing the third year. No interest charged for the first two years.

It having been found necessary to obtain land for soldier settlers, the Board has been empowered to acquire the same by purchase or otherwise. Such land may be sold to settlers at cost, ten per cent. being paid in cash at the time of sale, the balance being repaid in not more than twenty-five equal annual payments, on the amortization plan, with interest at five per cent., with privilege of repayment at an earlier date. When a settler possesses qualifications and equipment that assure his success in farming operations, the Board is empowered to forego the initial cash payment. No sale of more than 320 acres is authorized and the amount owing to the Board at any time must not exceed $4,500.

The Board is also empowered to purchase such live stock, equipment and building material as it may require, and to sell to settlers stock and equipment at cost, the terms of payment being as follows:—All cash at time of sale, or in four equal annual instalments beginning two years after the date of sale, amortization plan, interest accruing two years from the date of sale. The amount unpaid at the time of sale shall not exceed $2,000; which is to be a charge against the land, the title remaining with the Board until the

debt is discharged. Advances up to $1,000 are also authorized for permanent improvements, to be repaid in twenty-five equal annual instalments, amortization plan, the rate of interest being five per cent.

Arrangements have already been made by which soldiers going on land may buy agricultural implements, live stock, and harness at prices considerably below those charged ordinary purchasers. Eight or nine implement manufacturing companies have granted reduced prices and will render special service in supplying spare parts and making repairs. Four or five harness firms have granted reduced prices on harness; while, in the West, the United Grain Growers', Limited, have quoted reduced prices on practically all lines handled by them. This company will also give the returned men service at their 320 elevators scattered over the three prairie provinces. The Board has had specially designed a standard set of harness that will be sold to settlers at an average price of $32.50. The Western Retail Lumbermen's Association, representing 1,200 dealers in Alberta, Saskatchewan and Manitoba, has agreed to sell at wholesale rates, plus cost of handling, standard size lumber for settlers' homes. Live stock will be bought by the Board and assembled at various points where settlers can secure at the lowest prices the very best animals. In the purchasing of stock generally, the soldiers will have the benefit of the experts of the Federal Department of Agriculture.

Those directing the operations of the Soldier Settlement Board being well acquainted with the life of the settler on the prairies and its drawbacks, have taken special measures to reduce, as far as possible, the inconveniences attending it. So the matter of proper housing has received a great deal of attention at their hands. Not only have arrangements been made to sell lumber to the settler at reduced prices, but the Soldier Settlement Board has also undertaken to supply standard houses to soldiers who settle on the prairies. In this way the settler may save from 25 to 35 per cent. on the cost.

Of these houses there are four types, ranging in cost from $300 to $775. Type "A," which is 17 ft. 10 in. x 14 ft., costs $300, and contains two rooms. Type "B," built on the same plan as type "A," has three rooms and a basement. It is 24 ft. x 14 ft., and costs $590. In type "C," the roof is raised and an upstairs bedroom added, the cost being $700. Type "D" is on the same plan as "C," with three upstairs bedrooms instead of one. It has a living room, kitchen and parlor downstairs, and three bedrooms upstairs. The cost is $775. If the material is on the ground, these houses may be erected from within three to eight days.

These houses have been specially designed to meet the needs of prairie life. In order to make sure that they will satisfy requirements, the designing of them has not been left entirely even to capable architects. The plans have been submitted to, and endorsed by, women who have pioneered in the West, and who consequently know from experience what is needed. The Board will erect these houses, or if the settler prefers to do so himself, he has that privilege. The Board's architect, however, supervises the work.

It may also be added that it is proposed to provide plans for standard stables and implement sheds for the settler. This will be done at the minimum of cost, which is placed at $200 for a building 24 ft. x 12 ft., large enough to house four horses and two head of cattle. Special types of houses are being designed for British Columbia and the eastern provinces, due regard being paid to the local climatic conditions.

It is expected that, for the most part, those who take up land will have either been brought up on a farm or have had some experience in farming. There will, however, be others who, though possessing little actual knowledge of agricultural conditions, will make a success of farming, if they secure proper training. For such persons there will be two courses: Preparatory Instruction and Field Instruction. For the first of these it has been arranged that those who require it may be placed among capable farmers who are sufficiently interested in the returned soldiers to give them a chance to learn what is necessary. This term will last one year, during the course of which the man will be visited by an inspector who will report on the progress being made. For those who cannot go on a farm, a twelve weeks' Institutional course in practical farming is provided.

After the soldier is located on his land, the Board keeps in close touch with him, guiding and assisting him in every way possible. Through its organization it also builds up around him a strong spirit of community co-operation, which will do much to make the rough places smooth. It is confidently expected that in this way the returned man on land will have the benefit largely of the collective effort of the community in which he is located. In addition to this, from the time he enters upon the work of farming, he has the benefit of the best advice to be found in the agricultural colleges and departments of agriculture, both Dominion and provincial.

Such are the main features of the Land Settlement plan. In British Columbia, Ontario and the Maritime Provinces, the working of much smaller farms will be provided for. Indeed, the recommendations already made assure this. But these are subordinate features of the general scheme as already outlined.

The Remaining Enemy, Fire Waste

BY J. E. CLEMENT

General Manager, The Fire Insurance Company of Canada, Montreal

THE remaining enemy, Fire Waste, should now be attacked vigorously, thoroughly and incessantly. The task was evidently impossible by individual effort, but concerted and energetic efforts will accomplish the desired result. The assistance which the fire underwriters will receive from the Commission of Conservation and the Dominion Fire Prevention Committee, following the initial movement of the National Fire Protection Association, cannot but show some wonderful and immediate result. Wholesome legislation is of paramount importance, as are also stringent civic by-laws regulating new constructions and correcting existing conflagration breeders. Of course, if we are absolutely in earnest about controlling the fire waste, something will have to be done to replace in the large cities, within a specified time, the threatened shingle roof. Reasonable care on the part of insurance agents not to place temptation in the minds of some of their insured by giving them a policy which will be considered the best and easiest medium of liquidation will go a long way toward reducing the ash heap. The merciless application of the last amendment of the Criminal Code regarding the origin of fires, and also the proper understanding by the magistrature that the rights of insurance companies are also the rights of the public at large, will be other means.

Progress of Science and Industry in Canada*

The War has given an Immense Impetus to Industrial Development in Canada, and the Results which have been Accomplished in the last Four Years in Supplying War Munitions, in Increased Production of Foodstuffs, and in Increased Output of Manufactured Products have been Equalled only by the Country's Military Effort

By Professor J. C. McLennan, O.B.E., Ph.D., F.R.S.
Scientific Advisor to the Admiralty

IN dealing with the question of science and industry in Canada, it is necessary to keep in mind that Canada is a comparatively new country. Though its area is of vast extent and covers more than half of the continent of North America, its population is as yet small, and does not exceed eight millions all told.

Though much has been accomplished, the greatness of Canada is even to-day mainly potential. It is the land of opportunity. Solid foundations have been laid in education, in agriculture, and in the matter of railway transportation, but only a beginning has been made in developing the mines and the fisheries, and in exploiting practically all the natural resources in industries. The water-powers of Canada, which in magnitude are second only to those of the United States of America, are being steadily developed. Capital has flowed and is flowing into the country. The war has given an immense impetus to industrial development, and the results which have been accomplished in the last four years in supplying war munitions, in increased production of foodstuffs of all kinds, and in increased output of manufactured products of every variety, have been equalled only by the magnificent military effort which has been put forth. All of these accomplishments have, I believe I am correct in saying, been far away and beyond all expectations which were held regarding the capabilities of Canada, by the most sanguine and the best-informed of her leaders.

In the short time at my disposal it will be my aim to refer briefly to a number of factors which have contributed, and will contribute with increased force in the near future, to accelerate the growth in power and wealth of this our fair Dominion.

[Prof. McLennan here dealt in some detail with the subject of Education, referring particularly to the scientific work done in the universities. He then discussed Agriculture, referring to it as the basic industry of Canada and the greatest source of her wealth.]

The Mineral Wealth of Canada

Nickel.

About 80 per cent. of the world's supply of nickel—42,400 short tons—is mined in the Sudbury region of Ontario by three companies—one American, the International Nickel Co.; one English, the Mond Nickel Co.; and a newly-established company, the British-American Nickel Corporation.

The ores are sulphides, including pyrrhotite, pentlandite, and chalcopyrite, the pentlandite containing the nickel. The ores are roasted in heaps to drive off sulphur, and are then smelted in water-jacketed furnaces to a standard matte containing 25 to 30 per cent. of nickel and copper. This is further smelted in basic converters to Bessemer matte containing 75 to 80 per cent. of metals.

Each company employs its own process for the final separation of the metals; the International Nickel Co., by several smeltings with alkali sulphates; the Mond Co., by the aid of carbon monoxide which forms a volatile compound with nickel from which the metal is afterwards separated; and the British-American Corporation by an electrolytic process.

One problem to be solved in the metallurgy of nickel is an economic method of utilizing the sulphur dioxide which is at present turned into the air. As much as 1,000 tons a day escape from the waste beds, destroying vegetation for miles around. Iron also is lost in the smelting process. In the sulphur dioxide we have a source of enormous supplies of sulphuric acid, but the problem of producing it economically has yet to be satisfactorily solved.

Copper.

The total production of copper in 1917 was estimated to be 56,500 short tons, about 3.5 per cent. of the world's supply. It is mainly recovered from the metal-copper ores of the Sudbury region. Until last year no copper was refined in Canada, but the International Nickel Co., and the British-American Nickel Corporation have recently installed refineries in Ontario.

Zinc.

An electrolytic zinc refinery has lately been put in operation by the Consolidated Mining and Smelting Co. of Canada, at Trail, B.C., resulting in the production of 10,250 short tons of zinc. As the total zinc production for 1917 was estimated at 15,500 short tons—approximately to $14,000,000 in value, it will be seen that about 70 per cent. of the Canadian ore is now refined in Canada.

Gold.

Canada produces about 3.6 per cent. of the world's supply of gold. The value of the metal refined in Canada in 1916 was $19,234,976 in value and 930,492 fine ounces in amount.

Some 25.8 per cent. of the total was obtained from alluvial workings, 54.5 per cent. from the crushing of quartz ores and 19.7 per cent. recovered from ores and concentrates sent to copper and lead smelters.

Chrome Ore.

Several of the metals so urgently required for the manufacture of special steels for munition purposes have been supplied by Canada since the war. Canada is one of the principal sources of supply of chrome ore, and the production for 1917 was 23,327 tons, valued at $572,115. Investigation has shown that large supplies of low-grade ore found in Quebec can be successfully concentrated, and it is hoped that electric furnaces may be erected in that Province for the production of ferro chrome.

Molybdenum.

Before the war Canada produced practically no molybdenum. On account of the demand in 1915 successful prospecting was carried out, and through a method of concentration developed by the Canadian Mines Branch, the supply rapidly grew. The production increased from seven tons of molyb-

*Paper read by Prof. McLennan, Professor of Physics at the University of Toronto, before the Colonial Section of the Royal Society of Arts, London, March 4th, 1919.

denum concentrates in 1915 to 140 tons in 1917, forming a considerable percentage of the world's supply.

Magnesite.

Formerly practically all the magnesite used in the United States and Canada for lining open hearth and high temperature electric steel furnaces was supplied from Greece and Austria. The war caused the cessation of this supply, and after successful prospecting production in Canada rapidly developed. It was always supposed that the Canadian mineral was inferior to the European, but it has been demonstrated that with proper treatment it produces an efficient refractory comparable to the Austrian product. The Canadian production increased from 120 tons, valued at $840, in 1908, to 58,000 tons, worth $593,000, in 1917, a rise in value of 70,000 per cent.

The Mines Branch, Department of Mines.

The satisfactory position of the Canadian mineral production is in no small measure due to the highly efficient Mines Branch of the Department of Mines, under the directorship of Dr. Eugene Haanel.

The function of the department is to assist the development of the mineral resources of the country, and it carries out its work by the production of statistics and reports, and by scientific and economic investigations. The department has grown rapidly, and to-day comprises a chemical division, metal and non-metallic divisions, statistical division, fuel-testing station, ore-dressing and metallurgical laboratories, metallographic laboratories, ceramic laboratories, structural materials laboratory, and a road materials laboratory, besides the necessary clerical staff, library editorial division, and workshops.

Among the outstanding investigations that have been carried out are the electric smelting of iron ores, the production of metallic cobalt, and its use in electro-plating, the examination of Canadian coals, the analysis of mine air, the utilization of peat, the concentration of molybdenite, and the investigation of the available supply of building stones.

No less than 470 reports and bulletins have been published since the establishment of the Mines Branch in 1907, many of them of great scientific and economic value.

Coal Resources of Canada

The fuel resources of Canada are diverse in character and enormous in extent. If one considers coal alone, Canada's coal reserves take second place in the rank of the estimated reserves of the various countries of the world, the United States reserves being the greatest.

This being the case, there would seem to be no justification for the fact that some 50 per cent. of the annual coal consumption in the Dominion is imported from the United States. This arises from the geographical location of the coal-fields at present worked; the production being in the extreme east and in the extreme west, in the proportions (taking 1916 figures) of—

Nova Scotia	about 50 per cent.
Alberta	about 30 per cent.
British Columbia	about 18 per cent.
Saskatchewan	about 2 per cent.

of the yearly consumption.

It will be seen from the above that the Provinces of Ontario and Quebec, with their large populations and their extensive industries, are largely dependent upon the United States for their coal supply. This is also true of Manitoba and Saskatchewan. The Western Provinces, however, have many million tons of fuel available, but it is estimated that about 90 per cent. is lignite or of the sub-bituminous variety.

This lignite was recently the subject of a report by the Honorary Advisory Council for Scientific and Industrial Research, which devoted itself to the problem of fuel at the commencement of its activities.

This report recommends the production of a fuel suitable for domestic use from the lignites of Saskatchewan.

The method of manufacture projected is:

1. Carbonization of the lignite by which the moisture (some 40 per cent.) is driven off.

2. Briquetting, under pressure, of the carbonized residue, using a binder, such as sulphite pitch—a waste product from pulp mills.

3. Waterproofing of the briquettes by heating, which is intended to coke the binder.

The estimated cost per ton of briquettes at the mine is $7.00, which is $3 to $5 less per ton than Pennsylvania anthracite at the same place. The value of by-products such as gas, ammonium sulphate and tar is neglected in this estimate. The net result of the process will be that from two tons of lignite approximately one ton of briquettes, with a calorific value of anthracite, will be obtained. The Council recommended the expenditure of $400,000 on a plant, with a capacity of some 30,000 tons of briquettes per year.

As a consequence of this report, the Dominion Government, by an Order in Council, created the Lignite Utilization Board of Canada, which is financed by the Dominion Government and by the Provincial Governments of Manitoba and Saskatchewan.

The Lignite Utilization Board

The Board is at present investigating operating plants, machinery, and processes in the United States and in Canada, and it is expected that the Canadian plant will be in operation in the spring of 1920.

If this experiment is successful with Saskatchewan lignite, the other higher grade fuels will also be utilizable, and by public or private development along the lines proved to be the best, the Canadian Middle West should become independent of other fuel supplies.

Interlinked with the question of coal supply, and the development of coal resources, is that of hydro-electric energy.

In certain areas in Canada where the coal resources are small, the water-power available is extensive and can be used to release coal for heating purposes. It can be shown (it is a question of relative efficiencies) that, within the limits of practicability, fuel should be used for heating, e.g., houses and hydro-electric energy for mechanical power.

Recent figures (1916) show that about one-third of the total coal consumption in Canada is used by locomotives. Development of hydro-electric power, and the electrification of railroads, where possible, will be a step in the right direction, and will release coal for heating purposes, and vast numbers of railroad trucks for transportation.

Use of Hydro-Electric Energy

The use of hydro-electric energy on an extensive scale for heating cannot be looked to as a solution of a coal supply, either from the point of view of general considerations such as the seasonal load, or from the point of view of relative efficiencies. But as an auxiliary in such cases as electric furnaces, welding, cooking and heating on a small scale, it will help to ease the situation and release coal for more efficient use. It will be pointed out later that the best policy to pursue will be to develop, as rapidly as possible, all the hydro-electric powers available in Manitoba, Ontario, and Quebec, to use the electric energy as far as it is required in these provinces for mechanical power, in industrial works, and for electrifying the railroads, and to hold the balance as a means of

barter with the United States, in order to obtain from that country the coal required for heating purposes by the provinces mentioned.

[Prof. McLennan next dealt with the work of the Honorary Advisory Council on Scientific and Industrial Research.]

Canadian Water Powers

In dealing with the question of water powers in Canada, I cannot do better than refer you to the reports recently prepared by the Water Powers Committee of the Conjoint Board of Scientific Societies. In these reports it is pointed out that the organizations existing for the collection of information on water resources and their development in Canada are both Federal and Provincial.

1. *Federal Organizations.*

The most important of the federal organizations which contribute to this end are: (1) The Dominion Water Power Branch and the Irrigation Branch of the Department of the Interior; and (2) the Commission of Conservation of Canada.

The Dominion Water Power Branch.—(1) This organization carries out in New Brunswick and Nova Scotia all stream measurement work, and power and storage investigations, co-operating with the New Brunswick and the Nova Scotia Water Power Commissions in their respective Provinces; (2) does similar work in Manitoba as "The Manitoba Hydrometric Survey"; (3) carries out power and storage investigations in Alberta and Saskatchewan, co-operating with the Irrigation Branch of the Department of the Interior, which is responsible for stream measurement work in these Provinces; (4) carries out stream measurement work in British Columbia as "The British Columbia Hydrometric Survey," co-operating with the British Columbia Water Rights Branch.

The Dominion Water Power Branch also works in conjunction with the Department of Trade and Commerce in statistical compilation, e.g., in taking a census of electrical central stations and hydro-electric undertakings throughout the Dominion.

Investigations which touch on international and navigable waters are directed by the Public Works Departments, while meteorological data are supplied by the Meteorological Service for Canada, which is maintained by the Department of Marine and Fisheries.

2. *Provincial Organizations.*

The most important of the Provincial organizations are:

(1) The Hydro-Electric Power Commission of Ontario;
(2) The Quebec Streams Commission;
(3) The New Brunswick and Nova Scotia Water Power Commissions; and,
(4) The British Columbia Water Rights Branch.

The Provinces of Manitoba, Saskatchewan, and Alberta are distinct in that water power investigations and administration are under federal control.

3. *Summary of Hydro-Electric Powers Developed.*

The total estimated water powers of Canada aggregate some 18,800,000 h.p., divided approximately as follows:

	Per cent.	H.P.
Ontario	31	5,800,000
Quebec	32	6,000,000
Manitoba, Saskatchewan, Alberta and North-West Territories	18	3,500,000
British Columbia	16	3,000,000
Remainder of Dominion	3	500,000

Of the available power in the various portions of the Dominion, the following percentages, approximately, have been developed:

	Per cent.
Ontario	13
Quebec	9.5
British Columbia	7.0
Remainder of Dominion	2.5

The total development is about 10 per cent. to 12 per cent. of the whole available supply, amounting to some 2,310,000 h.p., of which quantity slightly under 10 per cent. is exported to the United States. Some notable developments in the country are as follows:

Quebec:	H.P.
Shawinigan Falls	200,000
Grand Mere Falls	125,000
Gres Falls	75,000 (under construction)
Cedar Rapids	120,000 (final, 180,000)
Chambly	20,000
Lachine	13,000
Soulanges Canal	13,000
St. Timothee	20,000 (final, 50,000)
Seven Falls	15,000 (under construction)

Several smaller plants are in operation, some of them on power sites capable of immense development.

Ontario:	H.P.
Chaudiere Falls	36,000
Lake Huron tributaries	56,000
Lake Superior	20,000
Rainy River District	22,000
Niagara Falls—	
Canadian Niagara Power Company	100,000
Toronto Power Company	125,000
Ontario Power Company	210,000

The Ontario Power Company is now owned and operated by the Hydro-Electric Power Commission of Ontario.

In Manitoba, the Winnipeg Municipal Plant and the Winnipeg Electric Railway Company's plant are capable of generating 80,000 h.p. In British Columbia there are several large developments, as follows:

	H.P.	
Kootenay and Kettle River	23,000	
Lake Buntzen	84,500	
Stave Lake	26,000	(26,000 being added)
Jordan River, Vancouver Island.	25,000	
Powell River	24,000	

[At this point detailed attention was given by Prof. McLennan to the work of the Hydro-Electric Power Commission of Ontario.]

Electro-Chemical and Other Industries

In closing the paper, I cannot do better than call your attention briefly to some of the technical and industrial consequences of the development of hydro-electric power in Canada.

In general, when a power has been developed in the past, the supply of energy rendered available was far in excess of the requirements of the local community for light and mechanical power in manufacturing industries. This state of affairs led to the erection of extensive and important electro-chemical works which need large blocks of cheap power to meet their technical requirements. Examples of this development are found in the Niagara peninsula, and in the developments on the St. Maurice River in Quebec.

Among the great works in the Niagara district a number are worthy of special mention. The American Cyanamide Company, which also has extensive works at Muscle Shoals, Alabama, has a capacity in its Canadian plant for producing about 64,000 tons of cyanamid per annum. Among its products, in addition to cyanamid, are ammonia, nitric acid, ammonium nitrate, cyanides and argon. It has recently erected works on the New Jersey side of New York Harbor for the manufacture of ammonium phosphate, sulphate of

ammonia and ammoniacal liquor. The supply of cyanamid for the New York works hitherto has been drawn largely from the Canadian works, but the supply will now be supplemented by the product made in Alabama. The phosphate rock used in making ammonium phosphate, I may add, comes from a mine the company recently acquired and is operating in Florida. There is also the Canadian Aloxite Company, whose product is carborundum, and the Acheson Graphite Company, which supplies large graphite electrodes for electric furnaces.

The Turnbull Electric Metals Company supplies low phosphorus content pig-iron, and the Exelon Company silicon carbide.

The Union Carbide Company has an output of calcium carbide of approximately 125 tons per day, and the Electro-Metals Company manufacture on a large scale ferro-silicon and electric furnace electrodes.

The Riordan Pulp and Paper Company has developed a plant for manufacturing calcium chloride from lime and salt for bleaching purposes, and as a by-product it produces caustic soda to the extent of about 35 tons per month.

In the River St. Maurice district we have, at Grand Mere Falls, the Laurentide Pulp Mills, producing about 250 tons of paper per day. At Shawinigan the Northern Aluminium Company and the Belgo-Canadian Pulp and Paper Company, have very extensive works. The Shawinigan Electric Metals Company is a product of the war, and produces large quantities of magnesium of a guaranteed minimum purity of 99.5 per cent.

The Canadian Carbide Company and the Canadian Electrode Company have large plants as well; but of all the developments which have taken place at Shawinigan, the activities of the Canadian Electro Products Company are, from a scientific point of view, probably the most interesting. This company, under the direction of Mr. H. W. Matheson, has developed a process for making acetic acid, acetone, and allied chemicals, synthetically from acetylene gas. Its present plant, which is the largest of its kind in the world, was commenced in May, 1916, and the first acetone was turned out in December of the same year. The complete plant consists of twelve buildings, representing an investment of approximately $2,000,000.

With reference to the process itself, this consists of:

(1) The conversion of acetylene gas to acetaldehyde in the presence of sulphuric acid and a mercury salt. The acetylene gas used in this process is generated in what is probably the largest acetylene gas-generating station in existence.

(2) The acetaldehyde is converted to acetic acid by oxidation in the presence of a catalyser.

(3) The glacial acetic acid is decomposed in the presence of a catalyser into acetone. One of the most striking features of the new process is the fact that glacial acetic acid of over 99 per cent. strength is obtained from the stills on the first run, thereby assuring quick and economical production of this very essential product. As air is used in this process for oxidizing the acetaldehyde into acetic acid, vast quantities of high purity nitrogen are left over, and at present are allowed to go to waste. With the supplies of calcium carbide available at Shawinigan, we may expect to see this nitrogen used before long for the production of cyanamid, ammonia, and nitric acid, ammonium nitrate and cyanides.

In dealing with the industrial development at Shawinigan, one cannot help referring to the new and vastly better conditions of living which the introduction of hydro-electric power assures for mankind. The town of Shawinigan is typical. It is scarcely twenty years old. It is beautifully situated among the Laurentian Hills. Here there is no smoke to darken the sky. The streets are well paved, and the houses are attractive architecturally. An elaborate town-planning scheme has been adopted, and all community and private property conforms to it. Large sums have been spent on community enterprises, including clubs, auditoriums and schools. As the industries are all highly technical, a minimum amount of unskilled labor is required. Large numbers of technical engineers of all grades are employed, and these, from the nature of their work and from the attractive surroundings, find their life a very profitable and a very happy one.

Had time permitted, reference might have been made in detail to interesting developments which have taken place in regard to the production of alcohol in Canada. This country, as you know, has gone "dry," with the result that all the distilleries are now directing their attention to the production of alcohol for industrial purposes. At present alcohol is being made from grain, molasses and potatoes. This, of course, involves a great waste of valuable food products, and, as the molasses is all imported, the industry, from a national point of view, is not economically sound. The Advisory Council on Scientific and Industrial Research is directing attention to this matter, and we shall probably see an atempt made soon to utilize the sawdust and wood waste of British Columbia, Ontario and Quebec, as well as the waste sulphite liquor from the pulp mills of these Provinces, for the production of alcohol in considerable quantities.

Shorter Hours in Ontario Shoe Factories

Action of Shoe Manufacturers' Association

AS a result of a series of meeting culminating in the latest held in Kitchener recently, the Ontario Shoe Manufacturers' Association are able to announce that practically unanimously throughout the shoe factories in Ontario, on or before June 1st, 1919, the hours of labor will be forty-nine and a half per week. This decision will affect about 3,500 workers.

The successful outcome of this movement is a considerable triumph for the capability, which amounts almost to a special genius, of Canadian business men to sit down together and reach a reasonable solution of any difficulty that may arise in a fair and business-like way.

The relations between employers and employees in the shoe industry have always been of the most cordial character. Few difficulties have arisen that have not been settled in an amicable spirit.

Since last June the matter of standardizing conditions has been under consideration. Various committees have been giving the different phases of the subject full consideration, and their reports have been fully discussed at representative meetings.

Owing to the fact that only about a fifth of the shoe workers had formal organizations through which they could be represented, a considerable part of the negotiating had to be done by individual firms taking the matter up with their employees and then reporting for action on a common basis.

At one of the meetings great stress was laid by the workers' representatives of the desire of the employees to have shorter hours of work in a day. Three reasons were advanced for this, two of which were somewhat contradictory. First, it was felt that the workers had something due to them out of the war. They should have more leisure time at their dis-

posal for self-improvement and social welfare in accordance with what they felt was the spirit of the times. Second, if fewer hours were worked, and production thereby decreased, the problem of replacing returned soldiers who wished to get back into the shoe trade would be more easily solved without creating disturbance among those workers who had been engaged in the trade during the war. Third, they stated that the hours would be slightly reduced without hardship or increased cost to the manufacturer, because production could be maintained on the same level as in working the slightly longer hours.

The two latter reasons are contradictory, and it was the last one that seemed to have the greater emphasis placed on it by the workers' representatives during the discussion.

At this meeting the whole economic situation was thoroughly gone into, and the matter of competition arising from outside the territory of the present enquiry where longer hours were in force and cheaper labor obtained, or where the productive units were so large that overhead costs and unit costs per pair were lower, thus creating favorable conditions for formidable competition.

The question was discussed most frankly and freely on both sides with an absence of suspicion that is becoming more and more characteristic of gatherings of this kind. A minority, however, seemed very determined about the institution of a forty-four hour week. The granting of this request seemed for the present a practical impossibility as there is a serious shortage of shoe workers in the province. Various firms reported a condition which showed that even working fifty-five hours per week they were unable to get within 20 per cent. or 30 per cent. of the production they desire, and no skilled shoe workers are available to enable them to get higher production by increasing their staff.

About seventy-five per cent. of the factories in Ontario are working the fifty-five hour week or longer. Anything more than a ten per cent. reduction in working hours might prove a serious blow to the whole industry, since it is yet to be proved that production can be maintained on the lower hour basis. The manufacturers, however, are confident that this forward step they have made will increase the co-operation they receive from the employees and will strengthen the cordial bonds between them.

The weekly earnings of the employees will not be lessened. Owing to the different systems in vogue of settling earnings in the different factories, no general rule can be laid down, but it is certain wages will be at least maintained at their present high level.

Manitoba's New Industrial Conditions Act

By H. MACDONALD
Secretary, Legal Department, C.M.A.

SIGNIFICANT steps towards greater intimacy in industrial relations are being made in several fields of Canadian industry. It is an encouraging sign of the times that the sanest employers and the ablest labor leaders manifest this spirit in increasing degree. Even if they consider nothing but their own interests, they will not allow what are often unimportant disputes to grow into strikes and lockouts.

The "Industrial Conditions Act," passed at the recent session of the Manitoba Legislature, recognizes in concrete form that the public interest requires that disputes between employers and employees, which retard industrial development, should be prevented or settled speedily without interruption to industry. This Act represents the first statutory enactment by a provincial government in Canada, providing simple and effective machinery looking to the settlement of industrial disputes by the appointment of a joint council of industry, subject to statutory control. The council consists of five persons—two representing employers engaged in industry in Manitoba, and two representing employees, with a chairman, who shall be an impartial person. The members of the council shall hold office during the pleasure of the Lieutenant-Governor in Council, and shall be suitably remunerated, the council being furnished with necessary office, accommodation and equipment for transacting its business.

The joint council shall have jurisdiction to investigate industrial disputes, the cost of living of employees, and shall encourage the foundation of co-operative organizations. The council shall also, from time to time, investigate the conditions of employment, housing, rates of wages, general hygienic conditions, and educational facilities—in short, shall act as a local authority on general welfare, on behalf of industrial workers.

Further, the council will be ready to render assistance as it may deem necessary, to enable employees to secure redress against oppressive or unfair treatment by an employer of his employee, and may direct a formal complaint against an offender before a court of competent jurisdiction.

The joint council shall make public all its reports, but in no case shall a decision be finally adopted by the council until after a duly advertised public hearing shall have been held, at which any party interested in the matter, or any citizen, shall be free to appear. The council shall have all such powers usually vested in any judge in civil cases, including the compulsory attendance of witnesses.

At the request of the parties to an industrial dispute, the council shall act as a board of arbitration and when so acting, shall exercise the powers of a civil court.

Among the advantages to be derived from the Act will be provincial uniformity of treatment and method, which could be effected only by legislation. Capital and labor are both under a moral obligation to consider the general public in relation to industrial disputes. Generally after a few hours' straight talk between the employers and the men, the representatives of both sides will find that their differences can generally be composed without subjecting the country to the alarm and dismay naturally provoked by the dread of a general stoppage of work. The lack of a proper industrial relationship is a matter of the most serious moment. Immediate effects of the form and character of industrial organization are greater and closer to the lives and happiness of all classes of citizens than even the form and character of the political institutions. Among workers of every class, there are constantly arising various questions for judicial settlement, which under present conditions, cannot speedily or satisfactorily be adjusted. To supply this want, the new Act of the Manitoba Legislature has been brought into effect. It seems apparent that we shall see more of this class of legislation.

The new Act was brought into effect by the Lieutenant-Governor in Council on March 29, when the Premier, Hon. T. C. Norris, requested the Prairie Provinces Branch, C.M.A., to name five gentlemen, two of whom would be appointed on the Council to represent the employers. At a meeting of the Executive Committee of the Branch, held on April 2, the following were nominated: J. W. Ackland, J. W. Ackland & Sons; D. J. Dyson, the Dyson Co.; L. R. Barrett, Vulcan Iron Works, Limited; W. R. Ingram, Swift Canadian Co.; E. Parnell, Speirs-Parnell Co.

Power Development in Maritime Provinces*

Hydro-Electric Power in Quantities Greatly in Excess of Immediate Needs Lies Practically at the Doors of Halifax, with a Similar Situation at St. John—Development Should Take Place at the Earliest Possible Moment Consistent with Economical Construction

By K. H. SMITH

District Engineer, Dominion Water Power Branch, Halifax

SO far as actual power studies in Nova Scotia go, we now have made studies covering sites with a continuous twenty-four hour capacity of about 100,000 horse power for ordinary commercial purposes, in which machinery is not used continuously. This is about sixty-five times the amount of power used in Halifax during 1917, although the demand for power in Halifax has largely increased during the past year. It might be noted here that a power site practically anywhere in Nova Scotia is within easy transmission distance of some industrial centre or shipping point. With such an amount of power already in sight, we felt justified during the past summer in curtailing this feature of our work somewhat, although a considerable number of power sites, known to be of fairly large capacity, remain to be investigated.

Our stream measurement or hydrometric work, which as I explained to you at a previous meeting is the basis of all our work, has been continued as usual.

Work in New Brunswick

One of the most important steps during the past year was the extension of our work to the Province of New Brunswick by arrangement with the local government of that Province. A resolution of your organization adopted at the Sydney meeting, over a year ago, undoubtedly had much to do in such a move. It has been found that work of such a nature as we are carrying on, can be carried on most economically and most efficiently by a single organization in the Maritime Provinces. As yet I can give you no definite figures as to power sites in New Brunswick, although we have our stream measurement work well established.

Another important feature of our work during the past year has been the passing of an Act known as the "Nova Scotia Water Power Act." The actual operation of this Act depends on detailed regulations which are now under immediate consideration and will be put into force at an early date. No doubt some of you have already seen this Act. Briefly, it places in the hands of the Government, the power to administer and control all waters in the Province, whether for water power or other purposes. All interests in any water power site may thus be harmonized and the interest of the public at large in this natural resource maintained. To some, it may appear rather drastic in character, but when it is properly understood, I think it will be apparent that it goes a long way towards facilitating development in Nova Scotia, and will ultimately be for the benefit of all concerned. Similar legislation for New Brunswick is now under immediate consideration.

Speaking in general, now that peace has come, we may expect an improvement in the conditions for carrying on construction work and securing machinery and may reasonably hope to see some water power undertakings begun in the Maritime Provinces at an early date.

Already in Nova Scotia, our preliminary information concerning one site, or rather a combination of several sites, has been the means of detailed surveys being undertaken by thoroughly reliable and responsible parties, with a view to early development, providing the information secured is satisfactory. In several other cases too, applications for water power sites are merely awaiting the completion and adoption of the regulations I have already mentioned.

It is evident, I think, that the Governments of both Nova Scotia and New Brunswick are now taking an active interest in water power matters. I think too, they are moving along the right lines, though there may be differences of opinion on this point and also as to the rate of progress which is being made. There is this to be said, however, that water power developments are of such a nature that they should be undertaken only after the most careful study. Also, I have explained to you on a former occasion how we are handicapped by a lack of essential data, which can be secured only as time goes on.

I am sure your interest in this question has been appreciated and suggestions from you, either individually or collectively, would be welcomed by the officials immediately responsible. No person understands better than you manufacturers the part which power plays in all branches of industry. Just at the present time, it seems that the greatest service you can render in aiding the power situation in the Maritime Provinces, and thereby yourselves, is by personal and individual effort in bringing about a proper understanding of power questions, particularly in the two largest centres of this part of the country. An adequate power supply in these large centres would form the nucleus for a system of transmission lines radiating ultimately to the smaller centres.

One Central Power Plant

It has been demonstrated that hydro-electric power in quantities greatly in excess of its immediate needs lies practically at the doors of Halifax. A similar situation appears to exist with respect to St. John, although in this case our information is not yet so definite. Now from the standpoint of economy and satisfactory service, each of these communities can best be served by having only one power distributing system in each. In this way, all duplication of transmission and distributing plant, which must ultimately be paid for by the consumer, is avoided. Furthermore, where steam generating equipment is modern and efficient, it should be utilized in conjunction with hydro-electric developments. Such an arrangement makes service more dependable and obviates large additional capital expenditure in the way of duplicate transmission lines and hydraulic generating equipment, which might only be used for brief periods throughout the day. This last feature is important, in view of the load conditions which now exist and are likely to exist for some time in the two cities mentioned.

In my opinion, the question of securing a single source of power supply in each community and of bringing together all parties interested in a really constructive effort to arrive at a satisfactory solution of the power question in each place

* Paper read at the Amherst Conference of Maritime Manufacturers.

is more important than whether such a system is operated as a purely municipal enterprise or by a private corporation. This much is certain, that if the public, through their officials, will inform themselves and agree on a definite line of action, no private corporation can in this day and age stand in the way of its being carried out, whether or not the best arrangement is a purely municipal enterprise, a purely private enterprise working harmoniously with the public, or some sort of a combination of these two, is perhaps a moot question and cannot be decided categorically for all cases. Perhaps different communities with different sets of conditions require different treatments.

So far as your own action in these matters is concerned, those directly responsible would undoubtedly appreciate the formal and collective support of your body as expressed in formal resolutions, if you approve of the action taken to date. You have already assisted materially in this respect as noted. Otherwise, possibly individual effort along the lines suggested will be most effective for the time being.

First, let it be known that a hydro-electric supply of power can be obtained immediately for the larger industrial centres of the Maritime Provinces, and ultimately with these as a beginning, other centres may also be served. Scond, insist that hydro-electric development must take place at the earliest possible moment consistent with economical construction. Third, insist that this development must take place in conjunction with existing facilities for generating and distributing power from steam, in order that duplication of overhead and capital expenditure may be avoided and that absolutely continuous service may be assured.

If these principles are well understood, we may expect that all interests involved, including provincial and municipal governments, private corporations, either now operating or seeking to operate, will speedily reconcile their seeming conflicting but really mutual interests. Failing this, governments will be assured that they have behind them a solid public opinion in taking such drastic action as may be necessary in connection with reactionary private corporations. At all times, however, it should be understood that private capital, genuinely invested and honestly administered, will receive fair treatment. This last point is probably worthy of special emphasis in these times when in some places, quite contrary ideas are hampering development or even creating entire confusion.

Proposal for a Tidal Power Plant

By W. RUPERT TURNBULL

(The following article forms part of an open letter addressed by W. Rupert Turnbull, Rothesay, N.B., to the people of Nova Scotia and New Brunswick, and which has received a good deal of attention in the press of the Maritime Provinces. The material is published in INDUSTRIAL CANADA at the request of the Maritime Branch.—Editor.)

FOR many years before the war I studied the problem of a great tidal plant to give power to these provinces, and I think the best plan is to lay the whole matter before the people, in the most candid manner, and let them decide, through their legislative houses, whether they wish to take it up or not.

The situation just before the war (and I presume it is the same to-day) was this:

After many years of work on the subject I had invented a means of obtaining continuous (24 hours' service) electric power from the tides, which is thoroughly practical when the topography of the land is correct, and the rise and fall of the tides is sufficient, to provide a practical "head" of water.

We have these conditions combined at the mouths of the Petitcodiac and Memramcook rivers, opposite Hopewell Cape, and a "tide electric" plant built at this point would be capable of furnishing over 120,000 gross horse-power, without any dredging of the Memramcook, and up to more than 200,000 gross horse-power by dredging the Memramcook, as increasing demand would require, many years from the present time.

System Is Explained

To explain the system briefly, a dam is built from Hopewell Cape to Coles Head, on the eastern shore of the Memramcook river, and a wing-dam and "spillway" connect this dam with Folly Point. The Petitcodiac is thus made a high-level basin, which is filled at every high tide, by means of electrically operated gates; while the Memramcook river is thus made a low-level basin which is drained at every low tide by similar gates. The power-house, with its turbines and electric generators, would be located on the wing-dam, and the water from the high-level basin would flow through the turbines directly into the tidal source (the Bay of Fundy) from half tide to half tide (through the low-tide period) and into the low-level basin (the Memramcook river) from half tide to half tide (through the high-tide period), these changes being accomplished by electrically-operated gates in the spillway under control of the attendants, thus obtaining continuous "24-hour service" from the plant.

In 1914 I took out a Canadian patent on this invention, and after working out the general plans of the Hopewell Cape plant, I laid the whole matter before a firm of New York engineers (in April, 1915,) and asked for their very candid opinion and criticism. This firm is one that makes a specialty of hydro-electric plants and has had great experience with them.

After going over my plans and estimates carefully their decision was briefly this:

Cost of the Undertaking

The project is thoroughly sound from an engineering standpoint, but we rather doubt if the population served is big enough to make it an attractive proposition for capitalists, since the return on the original investment would be small for several years, and until, in fact, the population served had considerably increased, when the investment would pay well.

The layman will have no difficulty in understanding this when I explain that the chief cost of the undertaking is the great dam (about two miles long), and this dam must be built whether the output from the plant is small or great. It is proposed to run the first power lines from the plant at Hopewell Cape to both St. John and Halifax, and power would be available for all intermediate towns and villages; such as Hampton, Sussex, Moncton, Amherst, Truro, etc., etc., the total power at present required being in the neighborhood of 60,000 gross, or 30,000 net at delivery points.

Now the initial cost of the undertaking is about $7,100,000 (exact estimates cannot be given until the site of the dam has been explored by borings), and if $30.00 per horse-power a year was paid, in the average, for the power, the gross receipts of the plant would be in the neighborhood of $900,000 per annum. Of this annual income 7 per cent. of the initial cost should be put aside for depreciation and operating expenses, so that the net income would not amount to more than

about 5 per cent. to 6 per cent. on the original investment, and this would hardly be attractive to capitalists at the present time.

In the course of five to ten years, population would come to the cheap power (as it always does), and when the demand rose to 120,000 gross, or 60,000 net horse-power, the investment would bear an entirely different aspect.

In the building of the original dam provision would be made for the installation of all turbines up to the full capacity of the plant (about 200,000 gross horse-power), so that as turbines were added, as demand required, there would simply be the cost of the turbines and generators to add to the initial cost of the plant, and we would then have a total cost of say

rights of the Petitcodiac and Memramcook rivers and valleys, and, very fortunately, these local interests would be affected very beneficially.

The dam itself would form an important highway connecting Hopewell and Folly Point, with the eastern shore, and supplanting a ferry service that is exceedingly irregular and unsatisfactory on account of the high tides.

The waters of the Petitcodiac would be held in by the dam, and "the tide" would only rise and fall six to eight feet (instead of the thirty-eight to forty-five feet as at present), vessels would be passed through a lock in the dam, and there would always be water at the Moncton and other wharves on



Dam on Lequille River, Nova Scotia, for Annapolis Electric Light Plant

$9,500,000, and the depreciation and operating expenses, on this at 7 per cent. would be $665,000, while the annual income would be about $1,800,000, so that the net income would rise to $1,135,000 or 12 per cent. on the total capital expenditure of $9,500,000.

As the demand increased the proportionate deductions for depreciation and cost of operation decrease, and eventually the return on the capital expenditure would be a very handsome one, and the plant could afford to reduce its charge to $25 per horse-power a year, and eventually to $20, or even less.

However, "Capital" is proverbially impatient and is not willing to wait for long periods for the returns on its investments, and it, therefore depends on the governments and the peoples of the two provinces to provide the capital for this undertaking, if they really want cheap electric power at the present time.

The question will naturally arise as to how such a plant would affect the navigational, farming, fishing and other

the Petitcodiac, where, at present, there are mud-flats much of the time.

The Memramcook is almost entirely an agricultural valley, its navigation is practically nothing—its grass-lands are protected against the highest tides by means of dykes, and these are only opened about once in two years to allow the salt water to flow over the grass-lands and fertilize them. The building of the dam would make of the Memramcook a "low-level-basin" and the waters in this river would be abnormally low most of the time, but to accommodate the agricultural interests of this valley, it could be arranged to overflow the grass-lands by one high tide (say, once in two years, or once a year, as the majority of farmers decided necessary).

This operation would interfere with the working of the "tide-electric" plant for about six hours, but by selecting a suitable tide, this interruption need only occur between midnight and 6 a.m. (on the night selected) and notice could be sent to all users of electric current of the interruption.



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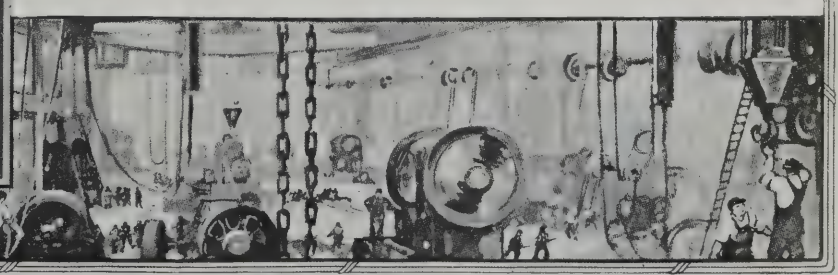
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Transportation Items

Railway Act

Special Committee of the House of Commons Now Dealing with Contentious Clauses

The amended Bill to amend the Railway Act has passed the Senate, and is now before the Special Committee of the House of Commons. A great number of the sections have been passed, and the contentious items are now being dealt with. The sections now under consideration are numbers 5, 6, 95, 151, 312, 335, 357, 373 and 436.

In addition to the above there is an amendment proposed to section No. 34 by a special Bill, known as "Senate Bill No. 6," which has for its object the placing of water carriers under the jurisdiction of the Board of Railway Commissioners.

Export Rates

Reduced Rates to Pacific Coast Ports for Export to New Zealand, Australia and Oriental Ports, Effective

Reduced rates on a number of commodities will be published in Canadian Freight Association (G. C. Ransom) Tariff No. 9-A, effective on or about April 25th. These new rates will apply from Eastern Canada to Prince Rupert, Vancouver Wharf and Seattle (for export), and have been published in line with similar reduced rates which were placed in effect from Eastern United States points to the American Pacific Coast ports for export. Generally speaking, the articles covered and the rates for such articles, shown in the United States tariff, are as follows:—

Commodity.	Min. Wt.	Rate in cents per 100 lbs.
Agricultural implements	30,000	100
Canned goods	40,000	100
Chocolate	30,000	150
Dry goods	40,000	120
Plate glass	40,000	140
Window glass	50,000	110
Grading and road-making implements	36,000	100
Iron and steel articles	80,000	60
Pig iron	80,000	55
Ferro-silicon	80,000	55
Lead, pig	60,000	75
Lime	50,000	65
Machinery	36,000	100
Machines, sewing	30,000	110
Lubricating oil	30,000	90
Oil well supplies	36,000	100
Paint	40,000	70
Paper and articles of paper	40,000	90
Plumbers' goods	30,000	150
Railway equipment	50,000	75
Roofing, roofing material, etc.	40,000	90
Rope, wire	50,000	70
Soap	40,000	100
Sodium (soda)	60,000	60
Starch, dextrine, etc.	50,000	90
Steam or hot water heating apparatus	30,000	125
Tobacco, cigarettes	30,000	135
Tobacco, domestic	20,000	140
Vehicles, self-propelling	10,000	375
Chasses, tractors, trucks or wagons	12,500	300
Vehicles, non-self-propelling	24,000	140
Wax, paraffine	30,000	90
Wheelbarrows and carts	24,000	110
Woodpulp and woodpulp board	40,000	75
Zinc	60,000	80

New Weight Agreements

To be Put into Effect by the Canadian Freight Association on Eastern Lines

For a great number of years railways in Eastern Canada have carried certain classes of commodities at shippers' or estimated weights, such weights being covered by an agreement allowing the carrier to check up from time to time the different shipments in order to protect the legal charges. For some time the question of weight agreements at points west of Port Arthur has been handled on a uniform basis by the Canadian Freight Association on behalf of all the carriers in that territory. In order to bring about the same uniformity on eastern lines—that is lines east of Port Arthur —the Canadian Freight Association intends to place in effect about the 1st of May new uniform weight agreements. These agreements are two in number, one covering uniform or standard weight articles or articles sold by weight, and the other covering shipments weighed on private or industry track sales. The operation of these agreements will be under the direct supervision of Mr. P. K. Perry, Chief Inspector of the Canadian Freight Association, Union Station, Toronto.

Steamship Service to South America

Two Steamers Will Load at Montreal for South American Ports in May

The Canadian National Railways will place the Steamship *Canadian Pioneer* on the berth at Montreal to load for Buenos Aires, Argentine Republic, South America, about the 15th of May. This is the first steamer to be placed in this service by the Canadian National Railways, and it is expected that others will follow. Rates will be quoted to those interested upon application to W. A. Cunningham, 230 St. James Street, Montreal.

The Houston Line intend to inaugurate a service between Montreal and Buenos Aires, Argentine Republic and Montivideo, Uraguay, South America. The steamer to sail will be the *Clan Keith*, expected on the berth to load at Montreal about May 5th. McLean Kennedy, Limited, Coristine Building, Montreal, are agents for this Line, and will be glad to quote rates, etc., on application.

Steamship Service

The Canada Steamship Lines, Limited, announce the inauguration of a new service to France, beginning with a steamer sailing from Montreal on May 24th. It is hoped that this steamer will be followed by others at ten-day intervals. Information may be secured by application to the offices of the Canada Steamship Lines, Limited.

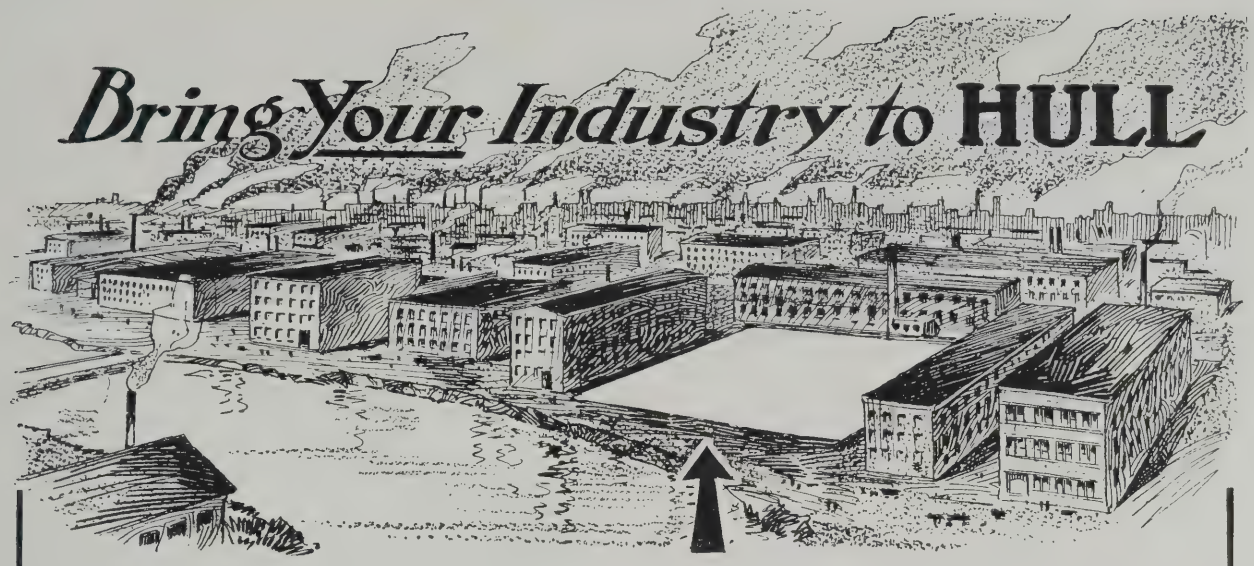
British Manufacturers in Canada

An Association has been Formed with Branches Located in Montreal and Toronto

The Canadian Association of British manufacturers and their representatives has been established with branches at Toronto and Montreal. Similar associations have existed in Australia and New Zealand for several years. The objects of the Association as set forth in the constitution are as follows: "To further the interests of British trade throughout the Dominion of Canada and to affiliate with and work in concert with kindred associations in other centres of the Dominion having similar objects."

Those interested in the formation of the Association naturally wish to increase Great Britain's share of the import trade of Canada. As Canada is buying a considerable volume of merchandise abroad each year, it is desired that the United Kingdom shall obtain a substantial share of that business. It is felt that the progress which Canadian manufacturers have made, especially during the past few years, will be exceeded by the manufacturing developments in Canada in the future. This is recognized as a welcome and gratifying feature, because as each unit of the British Empire becomes stronger industrially and agriculturally, each developing its resources, so will the great British Empire grow in stability, prosperity and influence.

No representative or agent of British manufacturers who enters into any agency agreement with, or in any respect represents any manufacturers or wholesale exporters whose principal works or place of business are situated in any country deemed by the Supreme Council to be or to have been hostile or unfriendly, will be entitled to membership of the Association.



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At the foundation of every success you find an appreciation of the value of Time.

Time makes or mars all things. Without a due regard for Time nothing is possible.

The Spaniards' "Manana"

There is a Spanish saying—"Manana," meaning "to-morrow." "Yes" says the Spaniard to every suggestion you make, "that is an excellent plan. We will certainly do it—'Manana.'" But to-morrow never comes. The inexorable scythe of Time falls. To-day Spain is one of the backward, the decadent nations—her real history is the account, not of battles and Kings, but of lost opportunities.

Waterloo—lost "on time"

The Battle of Waterloo was lost because General Grouchy failed to realize the importance of time. Hour after hour Napoleon had hurled his forces on the thin red line of the British, pitting against bull-dog, indomitable courage his, the greatest military genius, that ever lived. And then the moment came for the master stroke. That moment had been foreseen. General Grouchy had long before received his orders to throw in the reserves at a given time. But he was a quarter of an hour late in doing so, and the battle was lost and the destinies of the human race changed for all time. It was not that Grouchy was lacking in ability. Again and again he had proved himself a brilliant soldier. Napoleon's incomparable genius never made a mistake in his man. But when the fate of empires hung in the balance Grouchy underestimated the value of fifteen minutes. Time's scythe fell and swept away the beaten hosts.

Time—the great "raw material"

Turn for a moment to the consideration of modern manufacturing. The two great factors in the production of goods are raw materials and labor Time. There is a sum for which any given manufactured article can be profitably sold—if the time consumed in making be reasonable. But for every moment over this the profits dwindle. Then Time's scythe swings down, and they vanish. A great publisher had said—"Of all my raw materials the two of primary importance are paper—and Time. The paper I can have tested. But how shall I analyse the time I buy, or measure its quantity? It eludes the test tube. The time sheet is subject to human error, and is a frequent cause of complaint."

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To that question an answer can be given. The International Time Recording System does accurately, automatically, scientifically, the work of the gauge and the scales. It presents you day by day, or week by week, with a printed analysis of the time you have bought, and enables you to pay each employee exactly what he has earned. It does more. The test-tube at its best can only determine the quality and the scales the measurement. But the International Time Recorder not only records, it influences. The record the employee prints himself induces punctuality, makes for discipline, and eliminates one great cause of friction—***disputes over working time.***

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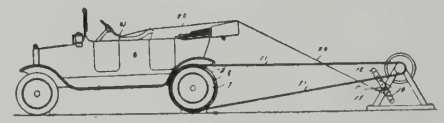
Patent applications through
Harold C. Shipman & Co.
Patent Attorneys - Ottawa, Canada



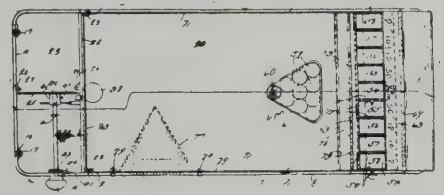
CLEANING ROD FOR GUNS, for establishing a ready and positive securement used in cleaning guns. The patch is wound about and interlocked with rod to prevent displacement. Can. and U. S. Patents for sale. Fred D. Brooks, Richfield, Idaho, U.S.A.



SELF-LUBRICATED SPRING FOR VEHICLES, interposed between the ends of the spring and the chambered bolts therein, same being adapted to allow the lubricant to flow therethrough to the leaves. Can. Patent for sale. John C. Dowd, of 122 E. Park Ave., Merchantville, N.J., U.S.A.
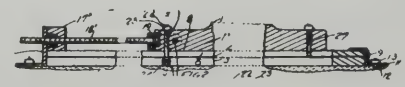


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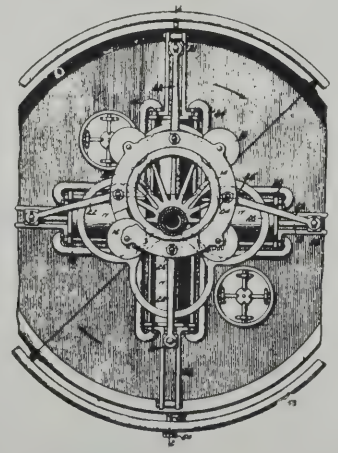
BELT TIGHTENER, particularly adapted for use in tightening belts of comparatively small machines, such as grinding machines, milking machines or small farm implements. Pat. rights for sale. B. Roberts, Bradford, Ont., Canada.



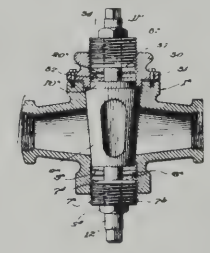
FUME ARRESTER FOR SMELTING PLANTS.—Gathers up all smoke and fumes from furnaces of smelting plants and causes same to pass from the furnaces by a suction of a suitable fan or other compressed-air device. Can. Patent for sale. Antonio Ferrari, Collinsville, Ill., U.S.A.



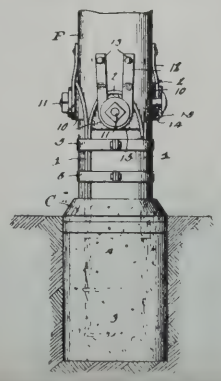
HAIR CURLER.—Is simply constructed, cheap to manufacture and will produce curls similar to those formed by nature. Will not discommode or be in any way uncomfortable to the user. Can. Patent for sale. Ella M. Pickard, 1527 W. 30th St., Oklahom, Okla,. U.S.A.



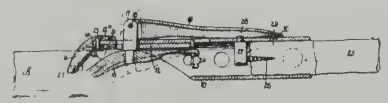
ROTARY ENGINE.—Can. Patent has been granted to Axell Watterberg, Sanish, North Dakota, on improvements in rotary engines. The axle protruding to the side and rotated so that anything can be connected directly to it without any gearing. It works as efficiently on the reverse as on the forward motion. Dominion Patent for sale by the inventor.



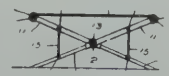
STOPCOCK, which may be packed at both ends, making it unnecessary to drive the plug into place to stop leakage, as is now the custom. As there are no threads or nuts on the bottom end a hammer may be used without damaging the parts. Can. Patents Nos. 188,110 and 181,111 granted to F. C. Heylman, P.O. Box 702. Martinez, Cal., U.S.A.



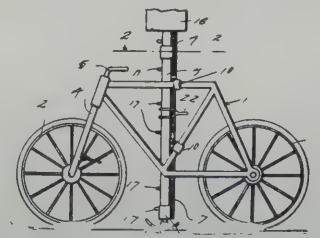
POST BASE.—To produce a reinforced concrete base adapted to rise slightly above the ground and having means for detachably connecting a post or pole therewith above the ground without interrupting the position of the base or altering its parts. Can. and U. S. Patents for sale. P. Hollingsworth, Clarkestown, Wash., U.S.A.



ATTACHABLE HANDLES.—Especially adapted for use on dishes, shallow pans and the like for frying over camp fires. Can. and U. S. Patents for sale. Arthur W. Dye, 27 Burlington St., Gloversville, N.Y., U.S.A.



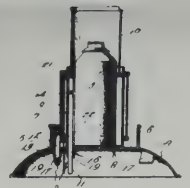
COLLAPSIBLE COT.—Cheap to manufacture, durable, substantial in design and can be quickly and readily collapsed into a compact bundle so as to occupy a minimum amount of space. Can. Patent for sale. John A. Juten, Gilbert, Minn., U.S.A.

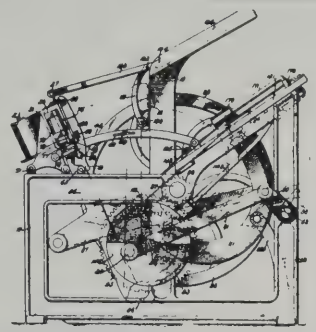


FOUNTAIN BRUSH.—To provide a simple, practical and comparatively inexpensive wheeled fountain brush designed for painting fences, white-washing and coating wire, etc. Can. and U. S. Patents for sale. William F. Kuck, P.O. Box 97, Bourbon, Ind., U.S.A.

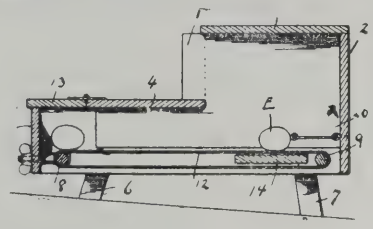
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LANTERN.—So designed to display different colored lights for signalling purposes, having a number of removable transparent cylindrical members adjustable to and from the burners. Patent in Canada for sale. Joseph N. Klema, 1311 Hope St., Austin, Minn., U.S.A.



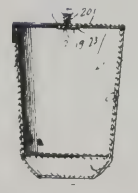


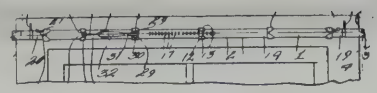
PRINTING PRESS.—Designed for use by business concerns using periodically a large number of bills being arranged to simultaneously print the body and the stub of the business instrument together with the name of the party for whom the instrument is intended. Particulars may be had by applying to Messrs. Harold C. Shipman & Co., Ottawa, Canada. (1018).



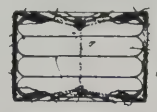
TRAP NEST FOR HENS, having a laying chamber, an egg receptacle in such relation that the eggs as laid will themselves roll into the receptacle, thereby removed from breakage or interference on the part of the hens. Can. Patent for sale. John A. Jones, Farmington, Me., U.S.A.

SANITARY SPUTUM-CUP.—Shows a complete metal cup with a snug fitting inner paper cup, saturated with a germicide. It will destroy the germs in the sputum and enable the attendant to handle it without fear. Can. Patent for sale. Lena B. Ashby, Homer, Ken., U.S.A.

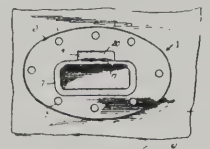




WINDOW SHADE HANGER, having sections which are adjustably connected, including yieldable means, whereby the hanger may be yieldably clamped to the window frame. Can. Pat. rights for sale. Dr. Wm. Kemble, 129 Clinton Ave., Kingston, N.Y., U.S.A.



SHIPPING RECEPTACLE FOR AUTOMOBILE TIRES.—For small lots of tires, whereby the packages may be made up quickly, conveniently, at a low cost, and will be adequately protected against damage during shipping, eliminating the necessity of wrapping tires in burlap or other such protective sheathing. Can. Patent for sale. Wm. R. Busenbark, of Akron, Ohio, U.S.A.

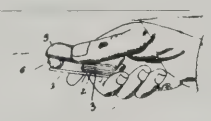


TRUNK HANDLE, or the like, which, when not in use, will lie in a closed position, so that it will not be struck, and may be readily extended when desired to lift the trunk. Can. Patent for sale. J. O. Wiley, Lebanon, Ore., U.S.A.



ADJUSTABLE WRENCH.—New and easily adjusted by means of a toothed lever, said lever being pivotally mounted. This wrench can be adjusted to receive any type or size of nut, and is cheap to manufacture. Can. patent rights for sale. D. Forniraseo, Klamath Falls, Ore., U.S.A.

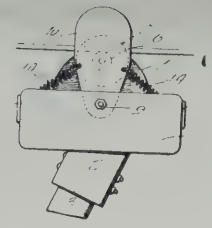
MARBLE PROJECTOR.—Canadian Patent granted Peter M. Knudsen, on the above invention. This article is cheap to manufacture, and should prove a good seller. Further particulars may be had by applying to Mr. Knudsen, Cartwright, N.D., or his attorney, Mr. F. V. Winters, 125 E. 23rd St., New York.

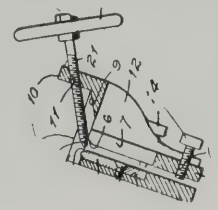




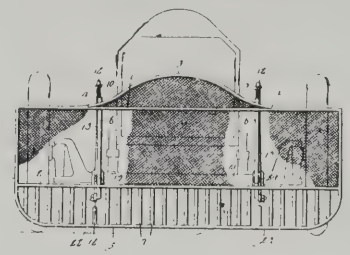
TURN-TABLE LOCK, having the locking means so connected as to permit of the latch bolts being automatically operated, thus preventing any accidental movement thereof and causing derailment of locomotive. Can. Patent for sale. C. E. Farr, Madison Station, Miss., U.S.A.

TROLLEY HEAD AND GUARD for preventing the trolley from slipping off the wire, said guards yielding when the trolley passes over a cross wire and being mounted independent of each other on both sides of the trolley wheel. Can. Patent for sale. Absalom D. Shaffer, Kittanning, Pa., U.S.A.



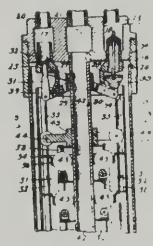


SAW SET.—Effectively sets the teeth of all kinds of saws without danger of injuring same, and is so constructed that it will hold the saws firmly in place and against accidental movement. Can. Patent for sale. J. A. Ferguson, Box 271, Plummer, Idaho, U.S.A.



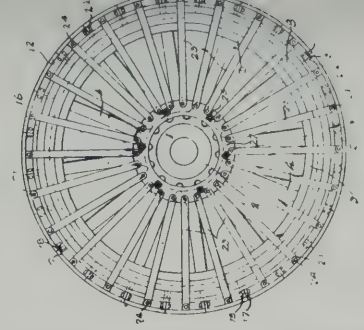
AUTOMOBILE FENDER, so constructed that the impact of a person or object against the fender is yieldably or flexibly sustained, enabling a person to be picked up without injury. Can. and U. S. Patents for sale. Nettie Weiss, 1725 Market St., Harrisburg, Pa., U.S.A.

WATER ELEVATING APPARATUS. — Can. Patent has recently been granted on the above construction to Mr. George F. Van Brunt, of Kewanee, Ill., U.S.A., who offers Patent for sale. This invention gives to farmers and others the conveniences of fresh running water at a very small cost.





CLOTHES-LINE PROP. — Simple and efficient; is provided with means for locking the sections in adjusted positions when the prop is supporting a line. Canadian Patent for sale. John C. Stillman, Appleton, Wisconsin, U.S.A.



The frequent complaints of surveyors and roadmasters and the great disadvantages under which these officials are placed during the spring and autumn seasons of the year owing to the condition of rural and country roads through the deep ruts caused by pneumatic tires in highways much travelled by automobiles and motor vehicles, and the consequent holding of rain water in the crown of the road, has given rise to much thought and lengthy discussions amongst municipal and other bodies interested in public road maintenance.

In the full enjoyment of paved streets and macadam roads the city or town dweller has but little thought for country road conditions, but the maintenance of the national highways is an important factor in the lives of dwellers and business men living and operating in rural districts and throughout the western provinces, where the automobile is an essential item in transportation and business of all kinds.

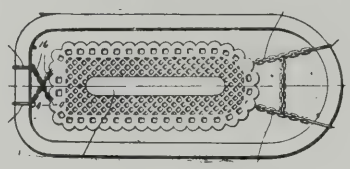
Bad road conditions are frequently aggravated by the difference in the treads or tires of the wheels of vehicles passing and repassing over the same highway, and the call is growing for a universal tire or tire-tread which will not only minimize the damage to the road-head but will also assist to pack it. The wheel construction here illustrated relates particularly to automobiles, and provides a tread which can be readily attached to the automobile wheel once the pneumatic tire is removed. The tread gives a wide bearing surface much in the nature of a traction wheel, thereby allowing the use of the automobile in all seasons and all conditions of roads. This tread has been designed by Mr. Wm. P. Spooner, of Webb, Saskatchewan, Canada, and is so constructed in a sectional manner that it can be readily assembled and adjusted to accommodate the varying diameters of automobile wheels.

This tire-tread meets the difficulty—the square head packing the roadbed while the half round pneumatic tire destroys it. The great bearing surface provided also enables the automobile or motor vehicle to carry the load better during the seasons referred to or over the winter snow. Further details may be obtained by communicating with the designer, Wm. P. Spooner, of Webb, Saskatchewan, Canada, or to his attorneys, Messrs. Harold C. Shipman, of Ottawa.

Manufacturers—Let us know what line of patents you are interested in, so we can send you copies from time to time.

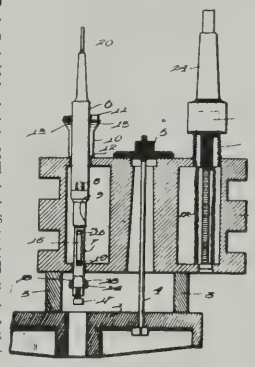
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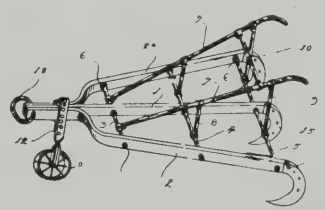
PATENTS FOR SALE



SAFETY BATH-TUB MAT, composed of rubber or rubber composition, has suction anchors and safety chain attachments. It is flexible, easily rolled, and is very convenient, sanitary for travelling, and is recommended for hospitals and sanitariums as well as for home use. Can. and U. S. Patents recently granted to Lavinia D. Tolley, 130 Lavergne St., Algiers, La., U.S.A., are for sale.

PISTON HEAD PLUGS, so arranged as to prevent loosening of the plug in the cylinder head of an engine and consequently entirely eliminating damage caused by such loosening. This patent 174,717 is interdependent on Can. Patent 188,204 held for sale by the inventor, Mr. B. W. Berry, 1250 Eighteen St., Portsmouth, Ohio.

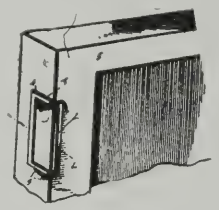




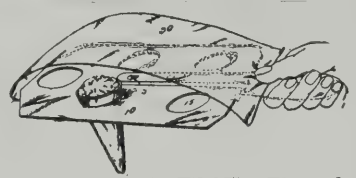
PLOUGHS AND CULTIVATORS.—Above illustrates an improved construction in ploughs and cultivators, and has for its object a device which can be easily converted from a grubbing implement to a plough. The invention is provided with a set of spaced bars having curved ends adapted to receive grubbing or ploughing members, whilst suitable handles and levelling wheel are mounted on the bars. Patent rights for sale or royalty. John C. Buell, Varilla, Kentucky, U.S.A.

FRAMES FOR WALL OPENINGS in doors which, with but slight and simple alterations, lends itself to various types and sizes of frames, and which requires but a minimum amount of cutting in forming a frame. Can. Patent for sale. Daniel M. Kelly, Cairo, Illinois, U.S.A.



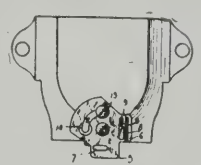


GAGE.—Adapted for use in hanging doors for indicating the extent of the wood to remove for the reception of the hinge. Patent in Canada for sale. Gunvald Holt, 1459 8th St., Greeley, Colo., U.S.A

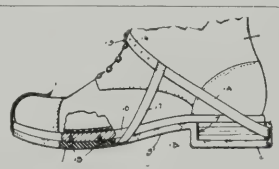


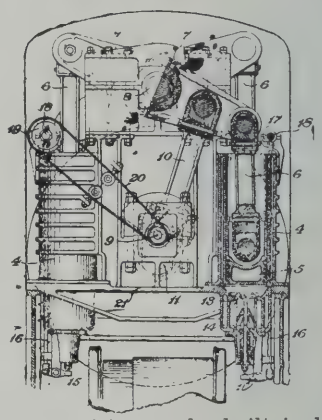
FAN AND CONE-TRAY.—The above illustrated invention has recently been patented in Canada by Mr. Harry F.Smith, 1100 Bushkill St., Easton, Pa., U.S.A., who is open to negotiations for patent rights or for rights to manufacture under royalty. The invention is to provide an attractive advertising novelty.

NEEDLE PLATE FOR SEWING MACHINES. — Is adapted for leather sole stitching or rubber and composition sole stitching, adjusted instantly for either work by loosening the screws a little way and turning the plate to the required position. Can. Patent for sale. George Schroder, South Berkeley, Cal., U.S.A.



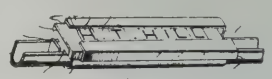
DETACHABLE SOLE FOR SHOES, the object of which is to provide a sole which may be quickly and easily adjusted to the shoe on a person's foot to protect the floors from shoes having hobnails or calks. Can. Patent for sale. Prokop G. Knizak and Bart Javorsky, 1505 5th St., Chehalis, Wash., U.S.A.

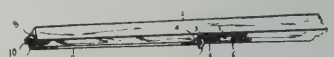




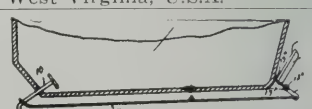
ENGINE, which may be built in large sizes up to 2,000 h.p. or more and yet be contained within the usual clearance limits of standard locomotives, having all the moving parts counterbalanced by other moving parts so as to eliminate practically all vibration. Can. Patent for sale. Francis W. Johnstone, 117 N. 14th St., Ft. Smith, Ark., U.S.A.

MEANS FOR ATTACHING NAMES TO UMBRELLAS. — Artistic and substantial; can be put on without tools and is so constructed that mail orders can be quickly assembled and mailed. This article should prove a good seller where umbrellas or parasols are sold. Can. Patent for sale. F. G. Farnham, Honesdale, Pa., U.S.A.





VEHICLE-TONGUE SUPPORT, consisting of a rod hinged to the vehicle tongue, whereby it may be swung from an inoperative to an operative position. This operation has been found very effective in operation. Canadian Patent for sale. Samuel R. Hogsett, Huntersville, West Virginia, U.S.A.



SIGNALLING DEVICE FOR AUTOMOBILES, to indicate, preparatory to the setting of the brake for slowing up or stopping the car that such slowing or stopping is to transpire, whereby the driver of a vehicle behind may govern himself accordingly. Can. Patent for sale. C. Bowers, Success, Sask.

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FOR SALE

Davis & Furber mule, 360 spindles, 2¼-inch gauge, 24 spool drums, 15 ends per spool. Machine in good condition. For full particulars apply Slingsby Mfg. Co., Ltd., Brantford, Ont.

FOR SALE

One Rope Wheel, 10 grooves, 4 ft. 3 ins. diameter, 5 15/16 ins. bore. One Rope Wheel, 10 grooves, 8 ft. 6 ins. diameter, 5 15/16 ins. bore. 10 Manilla Ropes, 1¾ ins. diameter, 4-strand, each about 175 ft. long (spliced). In good condition.

100 ft. 3 7/16-inch shafting, and 6 hangers for same; also 500 ft. 1¾-inch Manilla Rope, 4-strand (new). For further particulars apply The Slingsby Manufacturing Co., Ltd., Brantford, Ont.

FOR SALE

At Niagara Falls, Ontario, The Power City, solid brick building, two stories and basement, 40-h.p. boiler, hand elevator, eight thousand feet floor space; lot 40 x 120, additional land available; price reasonable; adjacent to post office and railways; possession June 1st; good opportunity to secure factory building at before war price. For particulars address Mortimer & Bampfield, Niagara Falls, Ontario.

WANTED

Efficiency man wanted for manufacturing plant. Man required should have analytical mind and his duties will be to check work throughout the plant, including trucking, elevator service, etc., with a view to reducing costs. Prefer man who has had some previous experience. Applicants must state experience and salary requested. Box 3,200, INDUSTRIAL CANADA.

WANTED

Manufacturer's agent wants reliable line to sell on commission in Western Canada. T. F. Beresford, 327 North Brock St., Sarnia, Ont.

BELGIAN REPRESENTATIVE

A Belgian gentleman, with many years' business experience and large connections, is desirous to obtain representatives from first-class Canadian manufacturers in all articles of alimentation, such as canned fruits, vegetables, fishes, jams, condensed milk, cheese. Good references. Box 3,000, INDUSTRIAL CANADA.

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FOREIGN TRADE OF CANADA

(Comparison, 1917, 1918 and 1919.)

IMPORTATIONS.

	Month of March			Twevle Months Ending March.		
	1917.	1918.	1919.	1917.	1918.	1919.
Dutiable Goods	$54,571,450	$50,637,294	$49,102,408	$461,708,206	$542,319,623	$526,495,717
Free Goods	47,764,436	36,618,404	22,647,161	383,622,697	420,202,224	389,947,715
Grand Total	$102,335,886	$87,255,698	$71,749,569	$845,330,903	$962,521,847	$916,443,432
Duty Collected	$17,072,384	$15,799,244	$14,781,753	$147,623,230	$161,588,465	$158,044,456

EXPORTATIONS.

Month of March.

	——1917——		——1918——		——1919——	
	Domestic.	Foreign.	Domestic.	Foreign.	Domestic	Foreign.
The Mine	$9,980,711	$11,850	$6,772,173	$877,653	$5,895,161	$230,710
The Fisheries	2,373,258	94,653	3,365,222	92,082	5,992,531	32,736
The Forest	3,614,385	1,217	3,922,820	1,276	5,630,022	1,945
Animals and their Produce	14,809,941	1,584,969	9,552,749	218,422	17,984,474	2,820,058
Agricultural Products	21,962,252	1,011,089	37,895,628	471,741	21,821,663	333,929
Manufactures	69,239,486	1,145,602	37,999,663	2,078,298	32,486,167	3,131,390
Miscellaneous	435,280	260,318	346,732	124,517	1,342,343	304,347
Total Merchandise	$122,415,313	$4,109,698	99,854,987	3,863,989	91,152,361	6,855,115

EXPORTATIONS.

Twelve Months Ending March.

	Domestic.	Foreign.	Domestic.	Foreign.	Domestic.	Foreign.
	——1917——		——1918——		—— 1919——	
The Mine	$85,616,907	$219,514	$73,760,502	$1,928,373	$77,439,963	$3,192,703
The Fisheries	24,889,253	429,502	32,602,151	619,024	37,137,072	732,322
The Forest	55,907,209	488,091	51,899,704	60,645	70,024,644	44,298
Animals and their Produce	127,795,468	7,517,342	172,743,081	7,125,087	197,805,478	8,687,055
Agricultural Products	373,413,701	7,451,069	567,713,584	10,036,766	269,819,833	21,447,173
Manufactures	477,399,676	9,913,090	636,602,516	24,237,914	549,284,268	16,069,548
Miscellaneous	6,353,554	1,816,724	4,706,250	2,134,195	6,102,548	2,148,380
Total Merchandise	$1,151,375,768	$27,835,332	$1,540,027,788	$46,142,004	$1,207,613,826	$52,321,479



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OFFICE AND FINANCE

Is Your Office an Asset or a Liability?

How Your Accountant Can Help "Boost" Business

By ROBERT ARKELL

Of Thorne, Mulholland, Howson and McPherson, Industrial Advisors, Toronto

NOT so many years ago an occasional increase in the office payroll was considered a necessary evil. Those were the days when the book-keeper sat on a high stool and confined his efforts to posting cumbersome ledgers. Production records, costs and sales statistics were considered a luxury by all except the large manufacturers who alone knew of the great advantage scientific office management gave them over their less fortunate competitors (?) .

A certain manufacturer, well known to the writer, started in business seven years ago with a cash capital that would have been considered woefully insufficient by the majority of business men, but his knowledge of the best office practice for the analysis and comparison of all his activities, from purchasing to collecting—through factory and sales department—has enabled him to climb to second place in a field of over a score of the keenest competitors.

On the other hand, the writer has found many offices almost "floating" in statistics and yet they were unable to make an intelligent report on any phase of their industry. It is obvious, then, that a mere tabulation of figures does not lead to success. Statistics are tools with which the manufacturer may open the way to bigger and better business but, unless the accountant knows what statistics are useful, a waste of time and money is bound to result. You would not think of trying to build a skyscraper with a watchmaker's set of tools, so why go to the trouble of preparing several pages of meaningless figures which do not assist you to stop your leaks? Such is the difference between red tape and common sense—success and failure.

Who is the Best Salesman?

Ask the average manufacturer who his best salesman is and he will name, without hesitation, the traveller who is sending in the largest volume of business. Put the same question to a manufacturer who *knows*—one whose profits are increasing steadily year by year—and he will probably name a salesman whose total orders would place him second or third in the other manufacturer's estimation. Why this difference in opinion, you ask? Because it takes more than a sheaf of orders to make a real salesman. In the first place it depends a great deal upon the cost of obtaining those orders whether one salesman's business is more desirable than another. Few manufacturers' pay all their salesmen the same salary and few salesmen spend the same amount for travelling expenses each week.

It is equally important, also, to know what returns or trades are involved in a salesman's business. Take pianos, for instance. If two salesmen sell the same number of the same priced piano but one takes back twice as many second-hand instruments in exchange as the other, it is not very difficult to determine which business is the more desirable. Every time a used instrument is accepted as part payment on a new one two sales have to be made to make one profit. Again: Supposing that two salesmen each have the same volume of sales and accept in exchange the same number of second-hand pianos, but one salesman has allowed more for his instruments than the other, it is equally apparent that the second salesman has secured a better class of business.

Or, let us take the clothing business. If Jones sends in $20,000.00 worth of orders and the customers return goods to the value of $500.00, he is certainly not as good a salesman as Smith who sold an equal amount and did not have any returns.

Then there is the question of new accounts. What manufacturer is selling to everybody who can handle his line? How many manufacturers know what percentage of the "possible" they are attaining? Is it not a distinct advantage to open several new desirable accounts each month? Then why not take this fact into consideration also when determining the efficiency of a salesman?

There are, then, four equally important facts to establish before any manufacturer can say who his "Star" salesman is:

1. What is the total volume of his orders?
2. What percentage did his business cost?
3. What value was accepted in trade? Or what was the value of goods returned by his customers?
4. How much accepted business did he secure from new customers?

There is also a fifth point to be taken into consideration by those manufacturers who produce a variety of articles

Trade Relations with Belgium

The Provincal agent of Quebec in Belgium, Mr. Langlois, is working at present to bring about closer trade relations between Belgium and the Province of Quebec. He believes in the possibility of enlarging these relations, and he suggests that the principal exportation houses in Quebec be asked to send him their catalogues. Mr. Langlois proposes arranging these catalogues in one of his offices in order to permit Belgian business men to come and consult them.

In case any one should wish to communicate with Mr. Langlois, his address is: Mr. Godfroy Langlois, Agent for the Province of Quebec, Immeuble du Credit General Hypothecaire, Boulevard Bischoffsheim, Brussels, Belgium. We are pleased to bring this to the attention of the members in Quebec Province.

BANK OF MONTREAL

Established over 100 Years

Capital Paid Up - - $16,000,000
Rest - - - $16,000,000
Undivided Profits, $1,901,613
Total Assets - $558,413,546

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NEW YORK—The Bank of The Manhattan Company
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and in all other principal centres

HEAD OFFICE . . TORONTO

bearing different rates of profit. If a salesman persists in specializing on those lines which yield the smallest returns his business is certainly not worth as much as that of the salesman who concentrates on the more profitable lines. It is well worth while, therefore, in an industry of this kind to analyze each salesman's business in order to determine the real value of his orders.

In short: Get the facts—use them—and the profits will follow.

Canadian General Electric

Substantial Gain in Profits for the Year 1918 Recorded in Annual Report

Net profits of the Canadian General Electric Co. for 1918 amounted to $1,436,483, an increase of $302,886. After paying dividends of eight per cent. on the common and seven per cent. on the preferred stock, there remains a surplus of $656,483, which, added to the balance brought forward from the previous year, makes a total of $1,122,776. The sum of $600,000 has been transferred from this to the reserve, which now stands at $4,600,000, and, adding the balance of $522,776 for last year, the total surplus amounts to $5,122,776, or over fifty per cent. of the par value of the company's shares, both common and preferred. There is now a reserve for depreciation of $4,336,182, and there are no outstanding bonds, debentures, mortgages, or prior liens, with the one exception of an existing mortgage on property purchased of $22,500 not yet due.

A significant feature in the balance sheet is the vary large surplus of current assets over all liabilities outside of capital stock. The total current assets stand at $9,393,278, as compared with $8,557,946 in 1917. The total assets now stand at $21,692,471, or a gain of about $1,500,000 during the year. The president pointed out, in his report to the shareholders, that during the last four years the Company manufactured and shipped orders for munitions valued at $15,287,284. Early last year, anticipating the termination of the war, operations were directed along the line of marine engineering, and at the end orders were on hand amounting to $5,490,707, of which approximately $4,000,000 was carried forward into 1919.

Abitibi Power & Paper Co.

Big Increase in Earnings Made by this Big Pulp and Paper Corporation

A gain of nearly twenty-five per cent. in net earnings was shown by the annual report of the Abitibi Power and Paper Company, Limited, for the year ended December 31, 1918. The net earnings amounted to $1,643,653, or an increase of $320,652 over 1917. The surplus available for dividends, which was $170,000 in excess of 1917, amounted to $511,202. With surplus carried forward, the amount standing to the credit of the company on the 31st December last amounted to $1,073,249. In his annual report to the shareholders, the president, Mr. F. H. Anson, said, in part: "Since the date of the balance-sheet submitted herewith, $498,000 of the company's bank indebtedness has been liquidated through the sale of additional first mortgage bonds, so that at this date the company's net working capital is in excess of $1,200,000. Payment of $1,500,000 of convertible six per cent. notes, due August 1, 1919, has been provided for by the sale of an equal amount of first mortgage bonds. As a result of these transactions, the company goes into the year 1919 in excellent financial condition, and hopes that within a reasonable time it will be able to pay off the dividends in arrears on its preferred stock amounting to 19¼ per cent."

Monarch Knitting Co.

A Seventy-five per cent. Increase in Profits Made by this Ontario Company

The annual statement of the Monarch Knitting Company of Dunville, Ontario, show an increase in profits of no less than seventy-five per cent. over the preceding year. Net profits, after providing for depreciation and war taxes, were $351,654 as compared with $202,413 in 1917 and $145,534 in 1916. The company's financial position proves to be so strong that a few weeks ago a dividend of four per cent. on the common stock was declared. In this connection, the report says, "The directors look forward with confidence to the business of the coming year, but they do not yet feel justified in placing the common stock on a regular dividend basis until conditions become more normal and until there is some assurance of continued stability in tariff legislation. The company is selling in the United States markets, having established a factory at Buffalo which, during the past year, made profits of $43,416, after provision for income, excess and war profits taxes. This profit has been retained in the Buffalo business as working capital. The president of the Monarch Knitting Company is Mr. F. R. Labor.

Canada Cement

Despite Smaller Earnings in 1918 the Company has Placed Itself in a Strong Position

The annual report of the Canada Cement Co. showed net profits for 1918 of $2,215,708, as against $2,861,246 in 1917 and $2,218,848 in 1916. After fixed charges and the regular dividend on the preferred stock the balance available for dividend on the common stock amounted to $1,060,644, equal to 7.9 per cent., as compared with 12.6 per cent. the previous year, and 7.7 per cent. in 1916. In the balance sheet the contingent reserve of $850,000 carries an explanatory note which says that part of it is available for government taxes. After all deductions, including $150,000 carried to reserves, the balance carried forward amounted to $100,644 against $484,181 the previous year, and $432,585 in 1916. Despite the smaller earnings, the company's balance sheet reflects the strong position it has placed itself in since it began munition work in 1916.

Canadian Fairbanks-Morse

Earnings for 1918 Showed a Substantial Increase over those for the Previous Year

The annual report for the year 1918 of the Canadian Fairbanks-Morse Company, Limited, shows not only a record from the standpoint of volume of trade, but also that of profit. After depreciation, war taxes and dividends had been deducted, the balance remaining for distribution to the common shareholders was, during the past year, $710,097, as against $691,973 in 1917, $546,629 in 1916, and $619,048 in 1915. The earnings shown for the past year represented 44.38 per cent. on the $1,600,000 common stock, against 43.2 per cent. in 1917, and 34.2 in 1916. After all dividend requirements were liquidated there remained a balance of $422,097 to add to the amount brought forward from the previous year, bringing the total surplus up to $1,762,537. This represents the equivalent of nearly 57 per cent. on the combined issues of $1,500,000 preference shares and $1,600,000 common.

The balance sheet shows several interesting changes from a year ago. The company ended the past year with no bank loans, and with cash on hand amounting to $519,861, while current assets exceeded liabilities by $4,300,000.

THE ROYAL BANK OF CANADA

Capital Paid Up..... $14,000,000
Reserve and Undivided Profits..... 15,500,000
Total Assets..... 427,000,000

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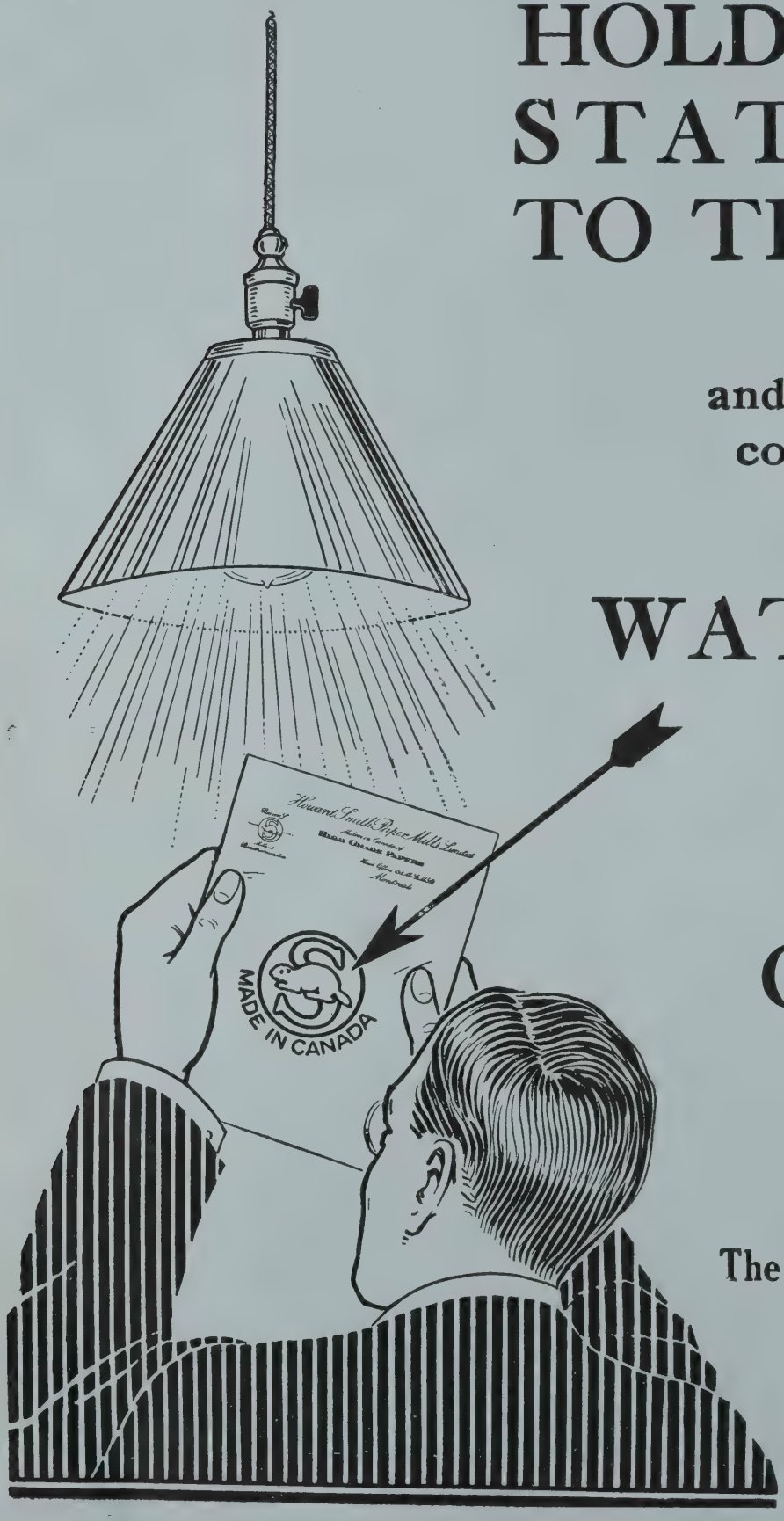
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Capital, $15,000,000. Reserve Fund, $15,000,000
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The World's Gold Banking Reserve

War has Taught Economists that Credit Business of Nations Can be Safely Conducted Without the Use of Such Large Amounts of Gold

By R. H. TINGLEY
(From "American Industries")

While gold mining, the world over, has been on the decline for the past few years, the holdings of the Government banks in all the principal European countries, except France and Italy, have increased substantially since the war started. The position of the Bank of Russia is not included in this statement and no information is at hand regarding Austria. The Russian Bank holdings have apparently decreased $376,000,000, but, as nobody can tell how much of this has been taken by the Bolsheviki and which may, in time, be reclaimed, little consolation can be gathered from reports from that unfortunate country.

According to recently published figures the Government bank holdings of gold in the belligerent countries (including Japan), and in the neutral European nations have increased from $2,911,500,000 in 1914 to $4,045,000,000 in December, 1918, or $1,133,500,000. In addition, the gold holdings of the United States have increased during this period from $1,900,000,000 to $3,080,000,000, or $1,180,000,000.

Without taking into account other lesser countries, then, it is apparent that the gold bank reserves of the world have increased during the war, something like $2,313,500,000.

It is apparent, too, that most of this increase in the hands of the banks of important neutral countries has come about by shipments of gold from the belligerent countries in return for goods. The same may be said of Japan, though one of the belligerents from the start; and of the United States, for our surplus supply came to us before we entered the war.

The increase in gold holdings of the Bank of England and the Bank of Germany, amounting in the former to $175,000,000 and in the latter to $282,000,000, has been obtained by the calling in of gold coin from circulation. France and Italy, too, have called in their circulating gold, but even with the increased amounts thus obtained in the central banks, neither country has been able to maintain a bank reserve in gold equal to pre-war times.

The above condition with respect to the world's holdings of gold rather tends to dispel the illusion that there is really any scarcity of this metal. What has happened is that these countries have stopped using gold as a hand-to-hand medium and are using paper money instead.

It may be that, as a result of the enforced withdrawal of gold, the circulation practice may never be resumed, at least, not to the same extent as heretofore. The gold problem may, in the future, be entirely separated from a widespread use as currency, and the maintenance of an effective gold standard, therefore, become more than ever a banking proposition. All of this is an economic move in the right direction. In stable governments there is no necessity of injecting so much gold into the circulation. Government paper, and that of the national banks based on gold, is a much more ideal and convenient circulating medium than the metal itself, and the metal itself is of much more value to a country, economically speaking, in the vaults of the big banks of issue than in the pockets of the people.

War has taught economists that the credit business of nations can be safely conducted without the use of such large amounts of gold. The credit business of the world has increased tremendously as a result of war. It has increased far out of proportion to the amount of gold that was heretofore considered necessary upon which to base it. It has become apparent, however, that, with the centralization of the money base heretofore out in circulation there exists enough to validate even the enormous credit transactions of war.

The Merchants Bank of Canada

Head Office, MONTREAL **Established 1864**

Paid-up Capital	$ 7,000,000
Reserve Funds	7,437,973
Total Deposits (November, 1918)	141,000,000
Total Assets (November, 1918)	173,000,000

President: Sir H. Montagu Allan, C.V.O.
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UNION BANK OF CANADA

Established 1865 **Head Office, WINNIPEG**

Paid-up Capital	$5,000,000
Reserve Fund	$3,600,000

Total Assets as at Nov. 30th, 1918, over $153,000,000

TO MANUFACTURERS AND EXPORTERS

who are reaching out for greater trade, over broader territory, the Union Bank of Canada offers a comprehensive banking service, complete and efficient. This service not only covers Canada, where we have 341 Branches, but through the Foreign Exchange Department of our London (England), New York and Montreal Offices, and the Commercial Information Bureaus established at these branches, it offers valuable assistance to Canadian Manufacturers who are selling Overseas.

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Why Great Britain is Restricting Imports

A Sudden Stoppage of Government Expenditure would Create Chaos because no Wages would be Paid to a Large Portion of the Wage-Earning Classes—Disposal of Stocks of Raw Materials held by the Government is Important—Manufactured Articles Subject to Restriction when not Necessary fsr Consumption

Statement by Sir AUCKLAND GEDDES

AS explaining the policy followed by Great Britain in restricting imports during the transitional period between the signing of the armistice and the complete return to a peace basis, the following report of a debate in the British House of Commons, participated in by Sir Auckland Geddes, Minister of National Service and Reconstruction, Mr. W. C. Bridgeman, Parliamentary Secretary of the Board of Trade, and others, may prove illuminating. Sir Auckland Geddes said:—

I am sure all members of the House regret that the President of the Board of Trade is not able to be in his place to-day to take part in this most important debate, and no one regrets it more than I do, because I have been asked to explain what the policy of the Government is with regard to the trade position. But I cannot, I am afraid, claim to have that intimate detailed knowledge which it is advisable for anyone to have who rises to explain policy. In the first place, I may perhaps indicate some of the difficulties of the position. I would ask the House to remember that we are still at war; we hope it will not be for long, but we still have to maintain a blockade of our enemies, and we still have the difficulty of maintaining that blockade which erects barriers in the area of neutral countries. The Government sincerely hope that before many weeks are past it will be possible to throw down these special barriers. But it is not only that which makes the dealing with the present situation difficult. There is another difficulty, and that is that we have been spending vast sums of money every day. In those vast sums is a wage element, and if we suddenly were to stop the Government expenditure there would be absolute chaos in the country, because no wages would be paid to a large proportion of the wage-earning classes. Therefore the Government has a difficult and delicate operation to carry out. While it slows down expenditure on capital account it must gauge the rise of wage payments on the civil industries account. It is the difficulty of keeping wage payments to the wage-earners as a whole approximately constant that is causing such great difficulty at the present time, combined with the fact that we are still at war. It is well we should have all this in our minds, and that we should realize the fact that these great difficulties exist.

Post-War Prices

The first point my right hon. friend the member for Peebles (Sir D. Maclean) made was this, that there was a policy, which he said was supported by the president of the Board of Trade, to keep up prices. I am in a position to state precisely what is the policy with regard to prices of those raw materials which the Government possess and control. The general policy is this, to endeavor to get down the price—the market price of the raw material to a level not higher than the anticipated post-war prices of that material. That is the policy which the Government is following with regard to the disposal of the stocks of materials which it holds, and as a safeguard where it holds large stocks of materials it is proposed to retain sufficient reserves of that raw material to enable the Government to defeat any attempt at a hold-up by merchants. There is a further instruction that where agreements permit the Department are to do everything they can in disposing of their surplus stock, to help British industry. There are certain of the goods which we hold on Government account as to which there are elaborate agreements which the Government cannot infringe, and in these cases the raw material is to be dealt with in accordance with the terms of the agreements entered into. That is the policy with regard to the prices or articles which the Government control—to bring them down to a level which may be regarded as a fair post-war normal level. If the prices were brought down lower it would, naturally, check production, and although it might give ease for the moment, it would have serious effects later on. Such considerations apply specially to some of the non-ferrous metals, and it is in connection with the great stocks of these metals which the Government hold that this policy is being vigorously pushed now. I repeat the general line on which we are working is to get the prices of raw materials down to the lowest possible level."

MR. FRANCE: May I ask what standard or advice is taken in fixing or anticipating normal post-war prices?

Fixing Post-War Prices

SIR A. GEDDES: Obviously, as the post-war price is a matter which lies in the future, there can be no absolute certainty that the price gauged is going to prove correct. There are, however, any number of facts which are known about the increase of wages, about the increase, for instance, in the cost of coal, of power, of shipping, and of transportation, and it is on these data that the prices are worked out, and in every case we are, with the experts who are engaged on this problem trying to assess as nearly and as fairly as possible the normal post-war price. I do not see what else can be done. It is quite clear that if the prices were dropped now a long way below the future price, production would most certainly be checked. Our stocks which are held, are not sufficient to cover a long period of years, and it will be a great danger to this country if any action now taken by the Government should lead to a check of production. I am sure that point will appeal to the House. There may be a difference of opinion whether the normal post-war prices are accurately estimated—there always are differences amongst experts, but the best opinion that can be arrived at is taken, and surely one could not do more than that. I have told the House what our policy is with regard to prices and with regard to the disposal of stocks which we hold. With respect to the other two great points raised by my right hon. friend—the policy with regard to imports and that with regard to exports—I hope to be able to give a clear statement of what the Government policy is.

Let me take imports first. I may refer to an answer given by my hon. friend the Secretary for the Board of Trade on

Friday, to the effect that "no import restrictions shall be or shall continue to be imposed on goods coming from any part of the Empire without the special consent of the Cabinet, which will not be given unless some unforeseen necessity arises." That is a clear statement of policy. It is that goods which have their origin or their manufacture or are produced within the Empire will come in without restriction. On the next point this is a definite statement of the policy of the Government—that raw materials required for our industries shall now be admitted free of restriction.

SIR D. MACLEAN: What does the right hon. gentleman mean by "raw materials?" Does he regard bottles as raw materials?

SIR A. GEDDES: That point is dealt with in the next paragraph.

MR. J. H. THOMAS: Is leather a raw material?

SIR A. GEDDES: I should say leather is part manufactured. Semi-manufactured articles which are necessary as material for the manufactures of this country are to be admitted free from restrictions, except so far as they are produced by industries which it is essential to foster in this country and which require shielding, in which case they will be restricted. What I wish to do at the moment is to give to the House a clear view of the policy which is being adopted, and once we have got that clear view we will see how various particular instances will be affected. I am sure that will be the most satisfactory manner of dealing with the question. I have given the import policy, first as to raw materials, and secondly as to semi-manufactured materials, and the position of articles which at the beginning of the war we found ourselves unable to produce in this country—industries which had to be created; remembering that we are still at war, and that our industries are still disturbed by war. The next point is that manufactured articles shall be subject to restriction when not necessary for consumption in this country. That means that when they are not essential for consumption, or when they are produced by industries which require to be shielded from foreign competition—industries which are disorganized for the purposes of the war, or which are disorganized while passing from war work to peace work, or which have been created or encouraged owing to circumstances arising out of the war—the restrictions in such cases will continue for a period not extending beyond 1st September next without a further review of the whole situation.

SIR D. MACLEAN: Does not that amount to this, that up to 1st September is the time limit, and, after that, as I understand it, the restriction of imports is going to be done away with? (Hon. member: "Reviewed.") Reviewed and not removed?

The Transitional Stage

SIR A. GEDDES: The policy of the time limit is quite clear. These are war restrictions; this policy is to deal with the transitional stage. We may find in the summer that the transitional stage is going to be prolonged. We may find it may be shortened, but it is not to be extended beyond the 1st September without further review. This it not the peace policy, this is the transitional policy, and what I am saying now is without prejudice to any policy which may or may not be arranged with regard to the permanent policy. This is a transitional policy, and the period taken for the transitional policy will, we hope, come to an end on the 1st September. The next thing, so that the House and the country may know exactly what is going on, is the form of instruction which has been given to the Board of Trade. The Board of Trade is to take steps to consider what shall be done to maintain in this country industries which it is the policy of the Government to foster—those are the industries such as I have stated—to consider definitely in detail the steps which are to be taken and to report to the Government. That policy need not be limited to any existing restriction.

A General Summary

That, I think, covers in a general statement, not in detail, the policy on which the Government is working; raw materials free at once, part manufactured materials, which are the raw materials of other industries, free if possible, unless by so bringing in those materials we are going to kill our industries which it has been shown by the war it is definitely in the interests of this country to have in the country. Otherwise, of course, the imports, though not prohibited, will be licensed and the total imports brought in will be watched. With regard to exports, there are three general heads under which I wish to deal with the subject. The raw materials will be free. The partly manufactured goods will be free as far as possible. From the point of view of the interests to which I referred, completely manufactured goods not free, and, as far as possible, not to be brought in unless they are essential for use in this country. The license of imported goods will continue. All sorts of considerations must necessarily arise with regard to the position of the exchanges as the flow of raw material increases. Take an example from the United States. We have there the whole question of exchange to consider. Probably there will be a heavy drain on the exchange as the flow of raw material increases. It is not contemplated, it is no part of the policy of the Government to shut down the existing importation of manufactured goods if, without detriment to the interests in the country, that importation can continue. Naturally one of the reasons for limiting imports is not to increase our debts.

Restrictions Are Lifted

Iron and Steel Manufacturers in Great Britain Free to Make their Own Terms

The following cablegram, dated 24th April, has been received by the British Government Trade Commissioners in Canada, Mr. G. T. Milne and Mr. F. W. Field, from the Department of Overseas Trade (Development and Intelligence):—"All subsidies and control over prices and material with regard to orders for pig iron, manufactured iron and steel and tin plates, will be withdrawn April 30th, subject to provisions of existing contracts and any export regulations. This means that manufacturers and merchants in the United Kingdom are free to make their own terms with regard to price and delivery from May 1st."

To Stimulate Inter-Empire Trade

Proposal Made to Establish an Empire Court of Buildings at the Canadian National Exhibition

The establishment of an Empire court of buildings by the Canadian National Exhibition is advocated by Mr. J. P. Murray, of Toronto. He proposes that the first building should be called the Canadian Building, and should be erected by the Federal Government. It would be planned to give full accommodation to each of the provinces, which would collect, label and tabulate the basic raw materials produced within their own areas. Afterwards, buildings would be erected to house raw materials from the other countries of the British Empire. Mr. Murray believes that this plan will do much to stimulate trade within the Empire.

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AMONG THE INDUSTRIES

Under this heading are published items of news of current interest concerning the activities of Canadian manufacturers. Information about changes of interest, enlargement of plants, and plans for future developments are welcome, and are published free of charge, provided they should not be properly classified as advertisements

***Items prefixed with an asterisk are based on official information received in each case from the companies mentioned. Other items, while secured usually from reliable sources, have not the same authoritative origin**

ALBERTA

Calgary.—The Coca-Cola Company will expend $70,000 on its new plant on Fourth Ave. W. Operations will commence soon.

The Alberta Flour Mills have taken out a building permit for erection of mill costing about $550,000.

BRITISH COLUMBIA

Prince Rupert.—The Prince Rupert Dry Dock and Engineering Co. has taken over under lease from the Grand Trunk Pacific Railway the shipbuilding plant and dry dock located here, and is at present entering upon the construction of two 8,100-ton freighters of the Dominion Standard.

Vancouver.—Pacific Electric Welding and Mfg. Co., 1018 First Ave., Seattle, Wash., plans erection of factory, to cost, including machinery and equipment, between $65,000 and $75,000.

A million-dollar factory is to be built in Vancouver, B.C., by the Coca-Cola Company, at the corner of Richards and Smyth streets. One story is to be erected at present and provision made for the addition of two stories later.

The Vancouver Portland Cement Co., Ltd., it is understood, is amalgamating with the Associated Cement Company (Canada) Limited, which is backed by English interests, and the consolidated concerns will carry on business under the name of "British Columbia Cement Company, Limited."

Plans are in progress for ice plant and cold storage, costing $5,000, for Vancouver Ice & Cold Storage Co., Gore St.

Replacing the old mill burned to the ground about a year ago, the Eburne Sawmills Company has now nearly completed one of the most modern plants on the Pacific Coast in the vicinity of Vancouver. The new mill is 500 feet long, and is capable of turning out 100,000 feet of lumber daily. A 750-h.p. engine will furnish power to the plant.

A building permit has been taken out by the Liquide Air Society, 1 Ernest St., Maisonneauve with headquarters at Montreal, for erection of a branch factory, the first unit of which will cost $25,000.

The Tudhope Electric Metal Co., Ltd., is erecting a plant on the C.P.R. reserve on False Creek and will install a large electric furnace.

Vernon.—Dominion Canners, Limited, are re-building office building recently destroyed by fire.

Victoria.—The Harbour and Marine Company, Ltd., which is laying down a plant at Victoria for the construction of two 8,100-ton steel steamers for the Dominion Government, will operate as a separate unit, their site being at Hospital Point, where a wharf has already been constructed for the landing of materials and supplies. A temporary yard office structure has also been completed.

MANITOBA.

Brandon.—The Coca-Cola Co. have started work on a $21,000 factory building.

St. Boniface.—The Clarx Milling Co., capitalized at $1,000,000, will establish a flour mill in this city. It is estimated that $25,000 will be expended on the plant of Stanley Springs Brewing Co., in order to convert it into suitable quarters. Extensions are contemplated at a cost of $275,000.

Winnipeg.—Upon the death of E. H. Bissett, president of Bissett & Webb, Ltd., who controlled the stock in the Owl Metal Co., Ltd., Winnipeg, the estate sold his interest to E. G. and L. R. Barrett, of the Vulcan Iron Works, Winnipeg. More capital has thereby been influenced, and the firm intends to operate on a much larger scale than heretofore, and are now erecting an addition to their present factory. They intend to recover metals from scrap and metal by-products, converting brass and bronze filings, turnings, borings, into ingots after refining. Their white metal department for the manufacture of solders for tinsmiths and plumbers, and machine type metals for newspapers and printers, is also being largely extended. The plant, which has been bought, is the very latest for the refining and casting of metals. As a result of this re-organization, the whole of the stock in the Owl Metal Co. will be held by well-known western men.

NEW BRUNSWICK.

Moncton.—J. A. Humphry & Son, Limited, are erecting two brick factory buildings.

Nordin.—The Miramichi Construction Co., Ltd., a newly organized concern, is taking over the assets of the International Shipbuilding Corporation, including their yards at Nordin, N.B., plant, machinery, stock of material and a 540-ton schooner which was being built when the corporation ran short of capital.

St. John.—The Palestine Film Co. of San Francisco has been negotiating for the establishment of a plant in St. John. It is proposed to incorporate a subsidiary company under the Dominion laws and manufacture and distribute moving picture films. The scenery around St. John appears to be suited to the needs of the company.

NOVA SCOTIA

Halifax.—Among the construction undertakings which the Halifax Shipyards are stated to have in view are a plate mill and a machine shop. The plate mill is to cost about $250,000 or $300,000, and will be of reinforced concrete. The machine shop, which will be the second to be built by the company, will cost about $70,000.

Sydney Mines.—Repairs are about completed to the furnaces of the Nova Scotia Steel & Coal Co. Operation of one rolling mill was resumed recently and the other mills are to recommence work within a few days. Plans for a complete reorganization of the company's plant are being worked out and a statement of development is expected within a few weeks.

Sydney.—The Dominion Steel Corporation is making progress in the extensions on the plant which have been planned for and which have been found necessary to meet the demand for their products and to meet the demand for labor employment. Work on the construction of the new power house has been started by the Foundation Company. The new power house will be built just north of the blast furnace boiler house, where there is plenty of room for enlargements. The second battery of coke ovens, which were under construction by the By-Products Co., are being made ready for the first bank. This marks the completion of two years' work by the By-Products people, the first bank of sixty ovens having been opened last year. Wabena, the Steel Company's source of ore supply in this country, is to have a new power house also. The mine at Wabena has always been electrically operated and the new power house means the extension of the work there. There will be a large power house, with two generators of 2,000 k.w.'s each and three sub-stations for the lower voltage. The construction on this has already started.

ONTARIO

Brantford.—Incorporation papers have been granted to Bayard Geekie Cobb, of the City of New York, engineer; W. J. Aikens, Dunnville, manufacturer; J. B. Detwiler, manufacturer; Thomas Hendry, insurance broker, and W. T. Henderson, King's Counsel, all of the City of Brantford, to acquire, erect, construct and operate furnaces for smelting and reduction of ores, metals and minerals, etc. The firm will operate under the name of "Electro Tin Products, Limited." Capital is $300,000.

Bancroft.—An expenditure of $500,000 is contemplated by the Canada Marble Co., 18 Toronto St., Toronto, for machinery and plant equipment in connection with development of marble quarries.

Cobourg.—Canning factory costing $150,000 will be erected here by Douglas Packing Co., Fairfort, N.Y.

Fort William.—Pipe foundry of Canadian Iron Corporation will be remodelled at a cost of $125,000.

Galt.—Contracts have been let for the construction of a factory for Riverside Silk Mills Co., Water Street N.

The Galt Art Metal Company, Ltd., plan the resumption of business on a pre-war scale and the employment of additional hands.

Sheldon's, Limited, have enlarged their plant by the addition of a new stock and pattern shop. The opening of this new building was celebrated by a dance which, it is stated, was one of the most successful in the history of Galt.

Guelph.—The Guelph Worsted & Spinning Co. propose to erect a one-story addition to their plant at a cost of about $20,000.

An extension is to be made to the plant of the Sterling Rubber Co., Limited, at a cost of approximately $10,000.

F. R. Ramsay, Montreal, and W. W. Grills, Toronto, are promoting a hat manufacturing concern, which will occupy that portion of the Morlock Block formerly occupied by Libby, McNeill & Libby. The company will be known as the Canadian Panama Hat Co., and according to agreement will employ not less than sixty hands.

Ratepayers on March 24 voted in favor of granting a loan of $50,000 and other concessions to the Premier Rubber Footwear Co. The new industry, of which Mr. F. E. Partridge, of the Partridge Rubber Co., is the head, will erect a four-story factory, costing $150,000.

Haileybury.—The United Iron and Machine Co., Ltd., will erect foundry and machine shop.

The Basis for Appraised Values for Fire Insurance

The adjustment of a fire loss will be made in accordance with the cost of replacement new, less depreciation at the time of the fire.

The appraised values for insurance purposes must therefore be in accordance with the present market conditions for labor, material and equipment. This is more particularly the case if the Co-insurance Clause is in force.

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Hamilton.—An extension will be made to the plant of the Zimmerman-Reliance, Limited, at a cost of $35,000. This concern, embracing considerable local capital, has taken over the business of the Uniform Cap Co., King William Street, and for the present will use its premises. Besides continuing the uniform part of the cap business it will branch out into other lines.

The Empire Meter Co. will commence operations at 134 North Bay Street within a short time. It will manufacture gas meters. The company has taken a year's lease of the premises and will erect a new building during the year. The product is a meter invented by S. J. Pocock, of this city, and requires 34 fewer parts than any other meter on the market.

The Barton Electric Co., which is occupying half of the building vacated by the Canadian Carborundum Co., East Barton St., will manufacture electrical appliances.

Kitchener.—Ten acres of land on South Street have been secured by the Four Wheel Drive Auto Truck Co., Clintonville, Wisconsin, for the erection of a Canadian plant. Provisional directors have been appointed, consisting of S. J. Williams, W. G. Cleghorn, W. T. Barrie, Henry Nyberg and E. C. Kabel, and it is expected that the plant when completed will employ at least 250 hands.

London.—Burrell D. Jones, of the Republic Motor Truck Co., has announced that the company will erect a factory costing $500,000.

Mimico.—Alterations and addition to plant are planned by the Ontario Sewer Pipe Co.

Parry Sound.—Lyons & Co. are installing new machines to take care of their growing business. They are installing one or two more automatics for the manufacture of pill boxes, which this firm specialize in. This work was practically all done in the United States formerly, and this local firm are corralling the bulk of this business, going in exclusively for pill boxes and making a success of it at that. An enlargement of the premises is contemplated shortly.

Port Arthur.—Work will shortly be started on the Carrick pulp mill. It will be built in 50-ton units, other units to be added as business warrants until the maximum capacity of 350 tons is reached.

Port Hope.—T. B. Chalk and J. R. Kennedy have leased the milling property on Barrett Street, now owned by the G.T.R., and will enter into the business of manufacturing veneer. The new company will be known as the Port Hope Veneer & Lumber Co.

St. Catharines.—Plant of Whitman and Barnes will be completed this spring.

Sarnia.—The Holmes Foundry Co. is contemplating the erection of fifteen houses on its property at the north end of the city. The company will commence shortly on the construction of a plant and the houses will be built near their factory.

Premises formerly occupied by the Sarnia Metal Products Co. will be occupied by the H. H. Robertson Co., of Canada, a branch of the H. H. Robertson Co., Pittsburg. The company will manufacture asbestos-covered steel roofing and siding, ventilators, gutter and down pipes, skylights and asphalt paint.

A company of local men, with A. W. Brown as chief stockholder, has been formed, with a capital of $200,000. The company will establish an ice plant in this city.

Erection of foundry costing about $150,000 is contemplated by the Romeo Foundry Co., of Port Huron, Mich.

Tillsonburg.—The Tillsonburg Shoe Co. proposes to erect a $15,000 addition and instal machinery.

Toronto.—Work has started on the erection of a $20,000 two-story brick factory for the Standard Bedding Co., 27 Davies Ave.

The Canadian Photo-play Production, Ltd., will purchase site for about $150,000 and erect studio for the production of films.

The Toronto Structural Steel Company has accepted an offer of $150,000 for its land and buildings, with certain fixtures. The Ontario Investments, Limited, is taking over the remaining assets of the concern for $165,000 in cash and the assumption of all liabilities. The Structural Steel Co. has not paid preferred dividends since June, 1914.

Work has been started on the new plant of Gunn's, Limited, at West Toronto. The cost of this project will be from $500,000 to $700,000.

Alterations which will convert a hall into a factory are being made for the Canada Feather Mattress Co., 41 Spruce St.

Plans are being prepared for a one-story reinforced concrete addition to the factory of Aked & Co., Limited, 1067 Ossington Avenue.

Plans are being prepared for a $40,000 manufacturing plant for the Canadian Ice Machine Co., Limited, 82 Chestnut Street.

Savoy Candy Co., Limited, 362 Bathurst St., are erecting an $8,000 addition to their factory.

Robertson Bros., Limited, 103 Queen St. East, will shortly start the erection of a 5-story factory at a cost of $60,000.

Willards Chocolates, Limited, are erecting a $90,000 warehouse adjoining their factory on Wellington Street West.

The Neptune Company, of New York, the largest manufacturers of water meters in the world, are locating a branch plant in Toronto, having obtained floor space in the former munition factory of the Russell Motor Car Co., King and Dufferin Streets. A new company, the Neptune Meter Co., Limited, of Canada, is being incorporated, and W. H. Randall, formerly superintendent of water distribution of the City of Toronto, will be managing director. Besides making the Trident Meter, the Neptune Company manufacture the Webber subterranean pump, which is very largely used for deep well work, and the Fletcher carbureter for automobiles.

Announcement is made that the Reliance Knitting Co., of Toronto, and Zimmerman Mfg. Co., of Hamilton, have united under the name of Zimmerman-Reliance, Limited, with a capital of $2,000,000. The president of the new company is F. R. Sweeney, who has been president of the Reliance, while A. F. Zimmerman is vice-president and general manager. The combined companies will employ upwards of 600 people.

Seaman Kent Co., Ltd., 263 Wallace Ave., plan establishing manufacturing plant.

Tenders are open for excavating (trench work only), concrete and brick work for $15,000 three-story mill and brick factory for Dominion Electric Switch Box Co., 10 Croft Street.

Rous & Mann, Limited, designers and printers, announce that they are now occupying their new building at 172 Simcoe St.

A permit has been issued to W. Harris & Co. for the erection of a glue factory, 66 x 145 feet, four storeys high, to be built on Keating Street, near Cherry Street.

A permit has also been issued to the Toronto Steel Construction Co. for a one-storey steel and galvanized iron mill building, to cost $20,000. This factory is to be used for the fabrication of steel for use in high office buildings.

A $250,000 factory will be built by the Holeproof Hosiery Co. at the corner of Bathurst and Clarence Streets.

The Chase Tractor Co. will shortly commence to manufacture tractors in Toronto. They will occupy the building lately vacated by the Cluff Ammunition Co., at 28 Atlantic Ave., but when business develops will secure a site in the Eastern Harbor Terminal. R. J. Cluff is president of the company.

Walkerton.—To meet the continued growth of the Canadian textile industry, and their continually expanding trade among that industry, the Canada Spool and Bobbin Company, Limited, of Walkerton, Ont., are making an addition to their plant and building this spring to the extent of $13,000, the company asking the town to guarantee the bonds to the extent of $10,000. While not under the present name,, the company have been in continuous business for over seventy years. They have operated under the name of the Canada Spool & Bobbin Company, Limited, since 1906. During the past year they have had an output of over two million bobbins, and with the new and up-to-date automatic machinery they are installing, they will increase that capacity to nearly three million. All classes of bobbins and spools are manufactured, and the Canadian textile industry can be assured in the future of their needs in this line being adequately attended to.

Plans are in progress to convert the saddlery factory into an up-to-date manufactory of iron and steel goods. Frank L. Clark, Woodstock; C. C. Larson, engineer, Woodstock.

The Canada Spool and Bobbin factory will erect building at a cost of $7,000.

Walkerville.—The General Motors Co. will spend $6,000,000 within the next eighteen months in extensions and new construction work.

Waterloo.—The Charles Mueller Company, Limited, have let contracts for the erection of additional dry kilns, costing approximately $5,000.

Welland.—The Nicu Steel Corporation, Ltd., will utilize the Electric Steel and Metals plant for the manufacture of nickel steel. H. A. Morin, local manager.

Windsor.—The Auto Specialty Mfg. Co., of Canada, McDougall Avenue, are erecting a one-story brick and concrete factory at a cost of $50,000.

Erection of machine and assembling plants costing nearly $1,000,000 is contemplated by the Maxwell Motor Car Co.

The Champion Spark Plug Co. will erect a plant costing $95,000.

B. H. Marsh will erect a candy factory this year at a cost of about $40,000.

A building permit has been taken out by the Kelsey Wheel Co. for addition to plant costing $15,000.

The International Castings Co., Ltd., is completing a modern casting foundry at the corner of Chippewa and Back Streets, which will cost about $50,000.

Wingham.—Aero Cushion Inner Tire Co. plans erection of factory.

The Seagrave Fire-fighting Appliance Co. expects to establish a big motor industry somewhere in Western Ontario. The Wingham Board of Trade hope to secure the industry for this town.

QUEBEC

Bedford.—Tenders are being received for a new needle factory.

Montreal.—Work has commenced on the erection of a two-story brick factory for the Barrett Co., Limited, 2021 St. Hubert Street.

The Canadian Footwear Co., of St. Genevieve St., has commissioned Alphonso Piche, architect, to prepare plans for extensive addition and alteration to their factory.

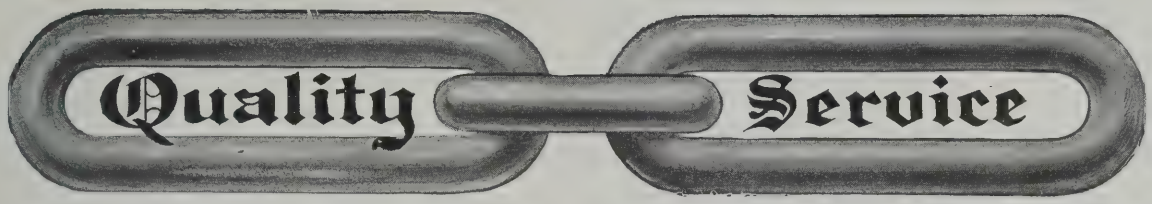
Work has started for repairs to factory for Mark Fisher Sons & C., Craig Street.

Gagnon, Lachapelle & Hebert, 55 Kent Street, plan erection of addition to factory.

The Alaska Bedding Co. have completed the extension to their manufactory.

The Crane Co., Ltd., plant is going ahead rapidly. The major part of this $730,000 factory will probably be completed by May.

A branch of the Canadian Link-Belt Company, Limited, has been opened at 1195 St. James Street, for the convenience of customers in the eastern section of Canada. A liberal stock of



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Believing QUALITY and SERVICE are the indispensable links between producer and consumer, we employ their combined strength to conserve and complete our relationship with all users of Steel and Iron products.

THE

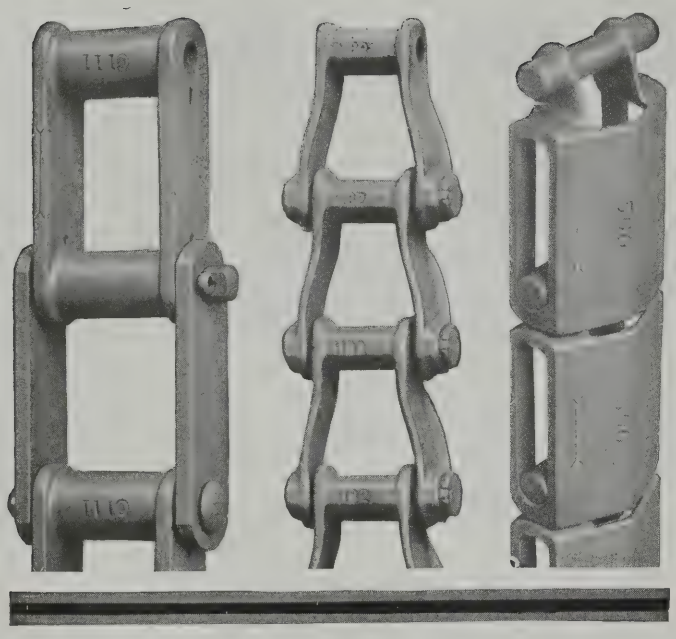
STEEL COMPANY

OF

CANADA

LIMITED

HAMILTON - - MONTREAL



LINK-BELT

For Every Purpose

WHETHER your problem is one of power transmission, elevating or conveying, we have a type of Link-Belt especially designed for the purpose.

And when we say "especially designed," we mean it. For our engineers have spent years in the study of the peculiar conditions and requirements which various industries place upon Link-Belt. Each type has been designed not with the thought of how cheaply it can be made, but how perfectly it can serve its purpose. We show a few types. Our catalog shows many others. Send for a copy.

Look for this Mark on Every Link

It is your guarantee of service and satisfaction.

CANADIAN LINK-BELT CO., Ltd.

Wellington and Peter Streets
TORONTO

Stock also carried at 1195 St. James Street, MONTREAL, Que.

popular types of Link-Belt will be carried in stock at Montreal in the future, from which all orders in that section will be promptly filled. This will not only enable the Canadian Link-Belt Company to render its customers a more prompt service than has hitherto been possible, but will also effect for them a considerable saving in freight and express. For the present, the Montreal branch will serve largely as a warehouse, all engineering assistance being rendered by the Canadian Link-Belt Company at Toronto, where Link-Belt is manufactured for the Canadian market. Although shipments for the Montreal and Quebec territory will be shipped from the Montreal branch, all correspondence should continue to be addressed to the Canadian Link-Belt Company, Toronto.

Excavation has been commenced for the three-story addition to the factory of the Tetreault Shoe Co., corner of Savoie and Demontigny Streets East.

Capuano and Pasquale Co., Ltd., contemplate the erection of a cigar factory on Windsor Street.

The Dominion Bridge Co. have been awarded the steel contract for the factory extension of La Reina Mineral and Soda Water Co., Ltd., Duvernay Street.

Walls are being erected for $5,000 two-story brick addition to factory for L. O. Grothe, Ltd., 556 St. Lawrence Blvd.

The Montreal Portland Cement Company, formed of British and Belgian capital, have purchased a site of 54 acres at Pointe-Aux-Trembles for $40,000, and work will soon begin on new cement plant to cost $250,000, and eventually turn out 4,500 barrels a day. The company has received exemption from taxation and free water for twenty acres from municipalities at Trenton. President Robert Dodd said no stock will be issued in Canada. The company will be producing 500 barrels daily by September.

Dominion Flour Mills, 300 St. Ambrose Street, plans $10,000 addition to plant.

St. Henry Show Co., 1581 Notre Dame Street West, plans $25,000 extension to factory.

Sherbrooke.—The MacKinnon Steel Co., Limited, have just taken a contract for the supply of all necessary steel work in connection with eight-story apartment house being erected on Drummond Street, Montreal, by P. R. DuTrembaly. The name of the general contractor is Alex. MacKay, Montreal. The valuation of the complete structure is five hundred thousand dollars, and the steel work will amount to approximately sixty thousand dollars.

SASKATCHEWAN

Saskatoon.—The Continental Oil Co., according to report, has decided to make Saskatoon its headquarters for northern Saskatchewan, having secured location for a filling station and offices. The company recently announced their intention of erecting a million dollar plant in Regina, and a large new warehouse and 30,000 gallons tankage is also to be alloted to Prince Albert, while the tankage at Saskatoon will be increased.

Canada's Lumber Output

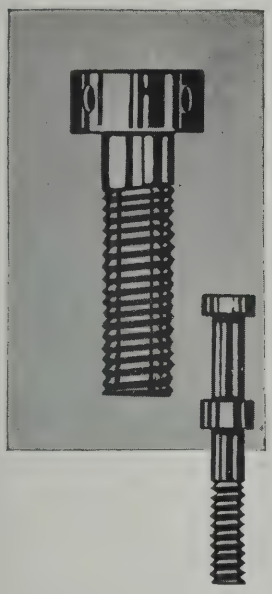
Canada's saw-mills produce annually from 3,000,000,000 to 4,000,000,000 feet of lumber, 95 per cent. of which is coniferous, it is stated in a new booklet issued by the Forestry Branch Department of the Interior, entitled "Important Facts about Canadian Tree Species."

It has been estimated that Canada's forests contain 600,000,000,000 feet board measure of saw timber, an estimate which does not include an enormous volume of smaller material suitable for the manufacture of pulp and for railway ties, poles, piles, posts, spars of ships, and other commodities made of material too small for sawing into lumber, according to the booklet.

Keep Electric Lamps Clean

Dirty electric lamps are inefficient and wasteful. A recent investigation in a large establishment disclosed interesting figures in the extent of this waste. A group of lamps with a week's accumulation of dirt showed an average absorption of light of 16 per cent., some of them running as high as nearly 20 per cent. Another group which had been used for three weeks had an average absorption of 22 per cent., with a maximum of over 26 per cent. Figuring on this basis, 16 per cent. more lamps at the end of one week, or 22 per cent. at the end of three weeks, would be required to obtain the same illumination that would have been obtained if the lamps were kept clean. This, of course, meant a corresponding increase in the electric light bill.—L. G. D.

SHEET METAL STAMPINGS and AUTOMATIC SCREW MACHINE PRODUCTS



Government precision calls for work that is absolutely perfect in each detail. We have supplied that work, and our experts and modern machinery used in so doing now stand at our customers' disposal running with the same accuracy.

Years of experience have taught us how to discriminate in selecting our material so that the work produced is of the finest quality and workmanship, while our prices remain reasonable and popular.

We will be pleased to give you our estimate on your next order.

CARON BROTHERS
CARON BUILDING
233-239 Bleury St. - - MONTREAL

Canadian Carbonate Company, Limited

Offices and Factories:

HALIFAX, MONTREAL, TORONTO

WINNIPEG, VANCOUVER

■

Manufacturers of

"CROWN BRAND" LIQUID CARBONIC ACID GAS

TRADE ENQUIRIES

These enquiries come into our hands from various sources. The Weekly Bulletin of the Department of Trade and Commerce, from which the enquiries indicated in the sub-heading allotted to them are taken should be read regularly by those interested in foreign trade. It will be sent free on application to the Department at Ottawa. Names connected with those enquiries can be furnished direct from the Commercial Intelligence Dept., Canadian Manufacturers Association, Toronto

DOMESTIC TRADE ENQUIRIES

301. **Nut Bowl.**—A correspondent, controlling the Canadian patent on a wooden bowl with metal nut-cracking anvil in centre, already well advertised in the United States, is interested in hearing from manufacturers who will purchase outright or make these bowls on a royalty basis.

302 **Benzol.**—A firm in Ontario is desirous of obtaining supplies of Benzol.

303. **Agencies for British Columbia.**—A correspondent is desirous of getting in touch with manufacturers of miscellaneous lines, with a view to representing them in British Columbia.

304. **Agencies.**—A commission merchant in Nova Scotia would like to get in touch with a number of millers who are not already represented in the Maritime Provinces.

305. **Agencies.**—We are in touch with a party who has been manager of a Winnipeg company for a number of years and is now going into the manufacturers' agency field. He wishes to hear from manufacturers not now represented in the West.

EXPORT TRADE ENQUIRIES

306. **Machinery.**—A London firm would like to have copies of catalogues and price lists of machinery used in the production of powdered milk (which must be soluble in cold water), and also full cream condensed milk, sweetened and unsweetened. Catalogues to be in duplicate, with lowest prices f.o.b.

307. **West Indies.**—A party in Dutch West Indies wishes to represent Canadian manufacturers of corn meal, rye flour, crackers, etc.

308. **Canned Fruits and Vegetables.**—A gentleman in London would like to hear from Canadian manufacturers of canned fruits, canned vegetables, canned fish, dried fruits, etc. He states that he can place large orders in these lines.

309. **Agencies.**—An indent and manufacturers' agent desires to represent Canadian manufacturers in New Zealand.

310. **France.**—We are in communication with a party in Paris, who has supplied satisfactory business and bank references, who wishes to act as agent for Canadian firms desiring export representation in France, Algeria and Morocco. He has been engaged in import and export trade in France for a number of years and has had considerable experience in the following lines: Automobile and machinery parts, steel cables and chemicals.

311. **Agencies.**—An agent in London would like to represent Canadian manufacturers of buttons, dolls and toys.

312. **Building Materials, etc.**—A firm in Australia, with branches in Sydney, Melbourne, Brisbane, Perth, etc., would like to hear from manufacturers of building materials, 3-ply wood, plaster, shafting, etc.

313. **Agencies.**—A St. Catharines gentleman, who is going to Great Britain, wishes to represent Canadian manufacturers.

314. **Agencies.**—We are in communication with a firm in Liverpool who are desirous of getting in touch with manufacturers who wish to be represented in England. They state that they are in a position to handle general merchandise.

315. **France.**—We have an enquiry from a manufacturers' agent in France who wishes to represent Canadian manufacturers of condensed milk, condensed cocoa, preserves, and dry vegetables in France, Belgium and Alsace-Lorraine.

316. **Binder Twine and Jute Bags.**—A manufacturers' agent in France would like to get in touch with manufacturers of binder twine and jute bags for cereals, with a view to representing them in France.

317. **Agencies.**—A correspondent, who has been in Canada for two years and has just returned to England, is anxious to secure a good agency for enamelled ware.

318. **Australia.**—A firm of import and export merchants in Adelaide would like to hear from Canadian manufacturers who wish to export their products.

319. **France.**—A correspondent in France, who expects to visit Canada shortly, is interested in developing trade between Canada and France, and would like to get in touch with Canadian manufacturers interested in this subject.

320. **Australia.**—We have an enquiry from an Australian soldier who has some capital to invest in a good proposition for Australia.

HELPING to SPEED the MAKING of MARINE BOILERS for "MORE SHIPS"



Commercial Acetylene is to be found in many such plants in all parts of Canada and the United States.

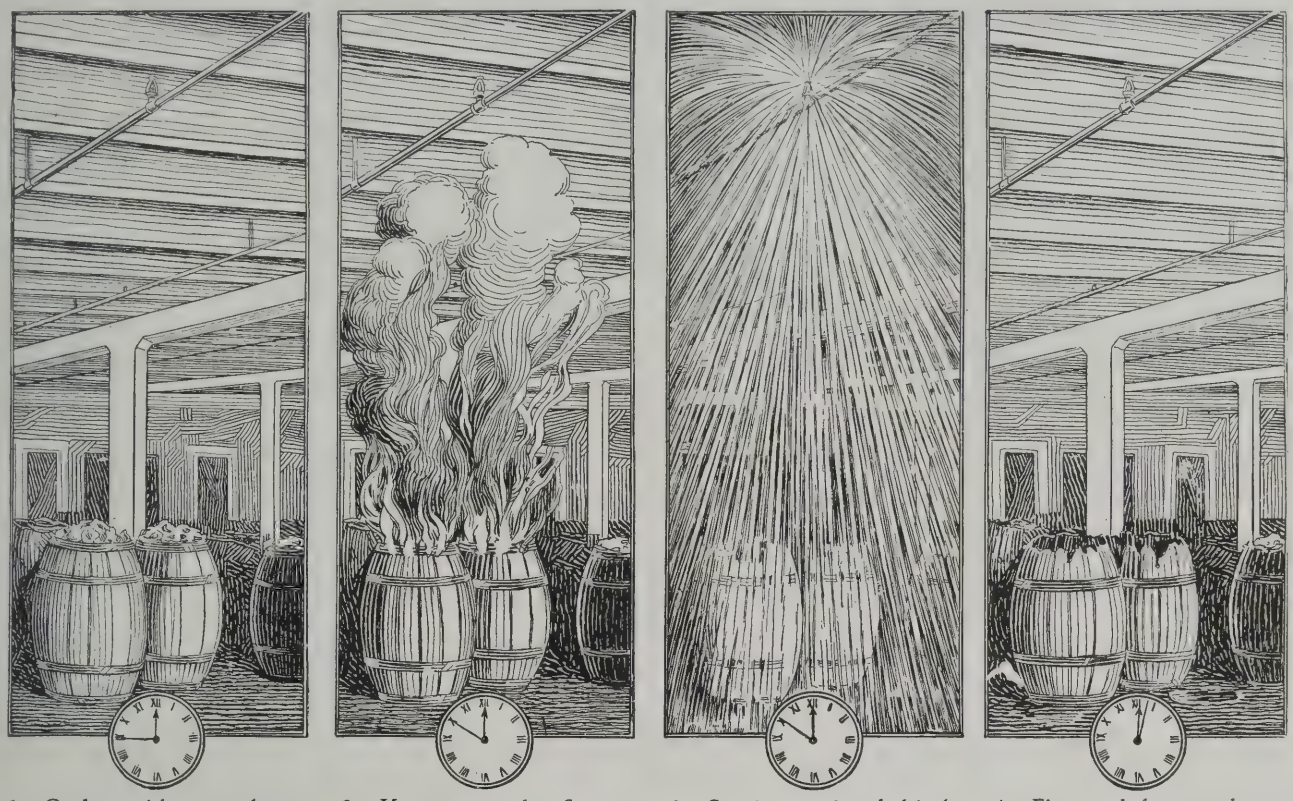
Are you familiar with our service and the quality of the gas we supply?

Main Office:
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Branches

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BOSTON, MASS.
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EAST DEERFIELD, MASS.
SAN FRANCISCO, CALIF.
MOBERLY, MO.
W. BERKELEY, CALIF.

Commercial Acetylene Supply Co., Inc.
18 TORONTO STREET, TORONTO



1. On duty with many others, waiting for a fire—waiting, perhaps, for thirty years, up in the dust and cobwebs near the ceiling.

2. Here comes the fire at midnight! The column of heat rises, and at 155° the fusible strut in the nearest Grinnell softens and melts.

3. Snap!—spurt!—splash! A drenching downpour, right on the heart of the fire, and there only. Alarm bell clanging in the distance.

4. Fire out before watchman arrives. Water turned off. No damage worth reporting. Next morning—business going on as usual.

SNAP !---SPURT !---SPLASH !

Here's a "GRINNELL" in Action!

FIRE can't start under a Grinnell Automatic Sprinkler System without starting the Sprinkler overhead. Just as sure as fire means ascending heat the fusible strut in a Grinnell Sprinkler head will melt at 155°, and release a drenching downpour of spray and ring the Fire Alarm.

If you own and occupy your own building, the saving in Insurance pays for the System in from three to seven years. If you don't have Sprinklers, you are paying for them anyway, and not getting the protection.

The best Sprinkler System is the Grinnell. Its price is a shade higher and it gets the price right along.

The Grinnell Standard is higher than the Fire Underwriters require. We don't try to see how close we can skate to the line. We are not content with satisfying minimum regulations. We undertake to give infallible fire protection. We maintain the only research laboratories in the trade.

A hundred Grinnell engineers have the whole technique of sprinkler engineering at their finger tips. Grinnell's, today, protects more property than all other systems put together.

Write us and get the facts and figures today.—Without cost or obligation to you.

CANADIAN GENERAL FIRE EXTINGUISHER CO.

LIMITED.

W. L. HORN, Managing Director

TORONTO, ONT.—2440 DUNDAS ST.
WINNIPEG, MAN.—910 SOMERSET BLDG.
MONTREAL, QUE.—370 BEAUMONT AVE.
VANCOUVER, B.C.—1140 HAMILTON ST.

SERVICE SPECIALISTS on G. F. E. Fittings, Steam and Hot Water Heating Installations, Power Piping.

321. **Representative.**—A correspondent, who has been in Canada for twelve years and has had several years' experience as a traveller, is desirous of communicating with firms who would like to send a representative to the Old Country. He states that he can produce good references as to honesty, etc.

322. **Mexico.**—An enquirer in Mexico is desirous of establishing commercial relations with Canada and asks for catalogues, prices, freight conditions and general information concerning machinery, fish, preserves, and any other products that Canadian houses may be prepared to export.

323. **Italy.**—A gentleman in Genoa would be glad to correspond with Canadian manufacturers desirous of opening up business in Italy.

324. **France.**—A firm in Bordeaux, having good business connections, are anxious to get in touch with manufacturers who wish to export their products.

325. **Agencies.**—An import agent in Paris, who has gathered some information about requirements in Roumania, would like to hear from Canadian manufacturers who are interested in granting sole representation to him for Roumanian requirements.

EXPORT TRADE ENQUIRIES TAKEN FROM THE WEEKLY BULLETIN OF THE DEPARTMENT OF TRADE AND COMMERCE.

326. **Chocolates.**—A London firm is desirous of securing the representation of a Canadian manufacturer of chocolates.

RIDOUT & MAYBEE
Solicitors of Patents
Counsel, Solicitors and Experts in
PATENT SUITS
Agencies in the leading countries of the World.
EDWARD MAYBEE, Mech. Eng. J. F. EDGAR, Counsel
KENT BLDG., YONGE STREET, TORONTO

CANADIAN COLLAPSIBLE TUBE CO., Limited
MANUFACTURERS OF
" Premier " Pure Tin, Plain and Decorated Collapsible Tubes
221 RICHMOND ST. WEST - - - TORONTO

"BEATTY"



Material Handling Plant has back of it 55 years of successful experience.

HOISTING ENGINES
STEEL DERRICKS
DIPPER DREDGES
CLAMSHELL BUCKETS
DERRICK IRONS
SUCTION DREDGES
etc.

Write us for Catalogue 21 and Prices

M. BEATTY & SONS, Limited, WELLAND

AGENTS:
H. E. Plant, 1790 St. James St., Montreal
R. Hamilton & Co., Vancouver
Kelley-Powell Ltd., Winnipeg
E. Leonard & Sons, St. John

327. **Upholsterers' Leather.**—A firm in Scotland asks to be placed in touch with Canadian manufacturers of upholsterers' leather for use by furniture makers, motor car body builders, and for ship furnishing. They are prepared to buy either outright or upon a commission basis, and to submit samples of hide patterns as used by their customers.

328. **Tool Handles.**—A merchant having an extensive business in South Wales desires to secures supplies of tool handles in hickory, ash and maple, from Canada. Handles required for all kinds of colliery, garden, agricultural and domestic tools in large quantities. Would also consider offers of pit-props.

329. **Agency.**—A merchant in Palermo, Italy, would like to have the sole agency in Sicily for Canadian manufactures of the following articles: Gelatine leaves, or sheets, paper, carbon, writing materials, perfumes, brushes, combs, razors, and articles of the coiffeur, shoe polishes and rubber boots, and other articles of similar nature.

330. **Ready-made Doors.**—A Sheffield firm asks for names of Canadian exporters of ready-made wooden doors.

331. **Dowels.**—A London firm desires to be placed in communication with reliable manufacturers of dowels in Canada.

332. **Woodenware and Hardware.**—An important London company, who are large buyers of broom handles, implement handles, washboards, dowels, clothes pegs, and all kinds of small turnery, are prepared to place orders for large and regular quantities with Canadian manufacturers, and in this connection to send out a representative to Canada if prospects of securing supplies are favorable. In the meantime they would like to hear from actual Canadian manufacturers possessing the necessary output capacity for handling export trade.

333. **Sole Bends and Waxed Splits.**—A Liverpool firm wishes to receive offers of the above.

334. **Sole Bends and Upper Leather.**—A Liverpool firm is interested in offers of the best grades of the above.

335. **Boots and Shoes.**—A Liverpool retail firm, who buy in considerable quantities direct from the United States, wishes to get into communication with Canadian manufacturers of the above.

336. **Woodenware and Hardware Goods.**—A firm in the north of Ireland wishes to be placed in touch with Canadian manufacturers of the following articles, for whom they are prepared to act either by purchasing or upon a commission basis: Washboards, clothes pegs, paper for felt making, wire nails and bale ties, whisks and brooms, iron or steel shoe rivets.

337. **Steel Hinges.**—A Midlands company wishes to get into touch with Canadian manufacturers of steel hinges.

338. **Wall Papers.**—A London firm wishes to purchase Canadian wall papers of English dimensions, i.e., 21 inches wide by 12 yards long.

339. **Sole Leather.**—A Lancashire firm asks to be placed in touch with exporters of sole leather.

340. **Birch Dowels.**—A Liverpool firm is in a position to place orders for birch dowels as follows: 20,000 ⅜ inch by 36 inch; 10,000 7-16 inch by 36 inch; 10,000 ½ inch by 48 inch; 10,000 ⅝ inch by 42 inch. They also wish quotations, c.i.f. Liverpool, on lengths up to 72 inches in ⅜ inch, 7-16 inch and ½ inch for a special order.

341. **Boots and Shoes.**—A Liverpool firm is interested in communicating with Canadian manufacturers of welted glace kid, box calf and willow calf boots and shoes. Medium and full toe lasts. No extreme shapes.

342. **Boits and Shoes.**—A Belfast firm wishes to secure a sole buying agency for Ireland for gentlemen's good class footwear in glace kid, box calf, willow calf, etc.

343. **Agency.**—A commission merchant in Lyons, France, interested in Canadian products at Lyons Fair, desires to obtain a special agency for entire France for the sale of Canadian products. Full details will be supplied in reply to direct communication.

344. **Food Products.**—A Toulouse firm, interested in Canadian exhibits at the Lyons Fair, desires to represent Canadian producers of all kinds of food products in Southern France, Tunisia and Morocco. The firm claims to be very well organized in these countries and to be in a position to furnish a big volume of business. References supplied.

Exports from Forests

Reports of the Trade and Commerce Department show that, for the year ending November, 1918, Canadian exports of primary forest products totalled $64,281,861. This is an increase of 22 per cent. over the previous year. The exports from the forest were very nearly double those from the fisheries, and were 85 per cent. of those from the mine. In addition to the primary forest products, consisting mainly of lumber and unmanufactured wood in various forms, wood pulp was exported amounting to $32,580,619, which wood in manufactured form, not otherwise covered, totalled $826,551. These figures are an indication of the economic importance of Canada's forests, in the development of her foreign trade. —C.L.

WELLS AND GRAY, LIMITED

ENGINEERS AND CONTRACTORS

Branch Office :
Bank of Commerce Building
Windsor, Ontario

Head Office :
701 Confederation Life Building
Toronto, Ontario

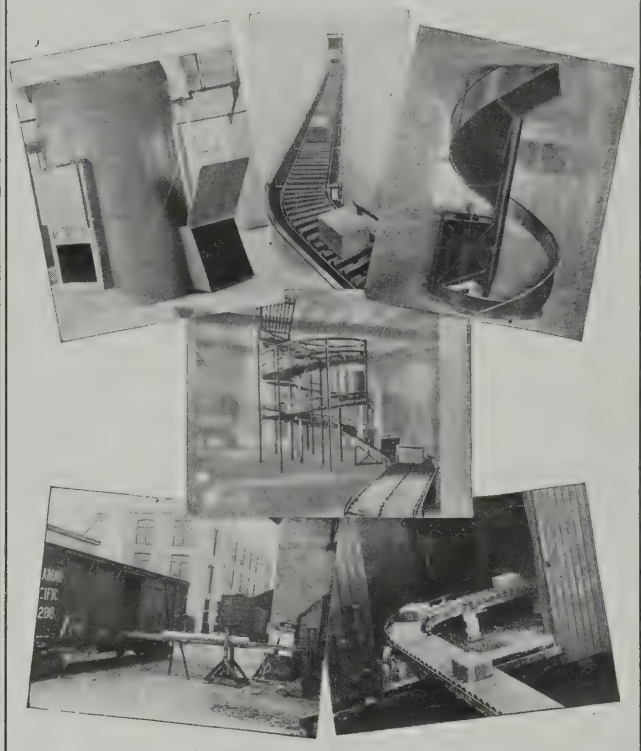
LIST OF WORK DONE DURING 1918

BUILDING	OWNER	LOCATION	APPROX. VALUE
Extension to Plant	Ford Motor Co.	Ford, Ont.	$65,000.00
Shot Tower	Peters Cartridge Co.	Kings Mills, Ohio	117,000.00
Primer Building	" " "	" " "	48,000.00
Miscellaneous Work	" " "	" " "	20,000.00
Extension to Roundhouse and Machine Shop, etc.	Canadian Pacific Railway	John St., Toronto	64,000.00
Cooler Building	Harris Abattoir Co.	West Toronto	90,000.00
Fire Loss Repairs and Extensions	" " "	" "	56,000.00
Extensions to Plant	Dominion Forge and Stamping Co.	Ford, Ont.	43,000.00
New Factory	Ideal Fence and Spring Co.	Windsor, Ont.	86,000.00
Extensions to Plant	Kelsey Wheel Co.	" "	3,200.00
Extension of Power Plant	Canadian Salt Co.	" "	3,000.00
Factory Building	Hiram Walker Metal Products Co., Ltd.	Walkerville, Ont.	63,000.00
Factory Buildings	Commonwealth Chemical Co.	" "	17,000.00
Gas Producer Building	Dominion Glass Co.	Wallaceburg, Ont.	6,300.00
Condenser Tank	Public Cold Storage Co.	Toronto, Ont.	10,000.00
Ice House	Canadian Pacific Railway	West Toronto	33,000.00
Ice House	" " "	North Toronto	2,000.00
		Total	$726,500.00

Of this total $500,000.00 worth of work was done on a percentage basis.

Every one of the above contracts was obtained, because we had previously given satisfaction on other contracts for the same owners.

WELLS AND GRAY, LIMITED



For Full Information Write for Catalog I

Canadian Mathews Gravity Carrier Co., Ltd.

PORT HOPE, ONT.

Manufacturers and Erectors of

STRUCTURAL STEEL AND STEEL PLATE WORK

of all kinds



BRIDGES A SPECIALTY

MACKINNON STEEL CO.

LIMITED

SHERBROOKE - - QUEBEC

Montreal Office : 404 NEW BIRKS BUILDING

A Made-in-Canada Motor Truck

The Clyde Car Company Canada, Limited, Are Now Manufacturing a Truck Almost Wholly Made in Canada

A prominent manufacturer and member of the Canadian Manufacturers Association recently purchased an American-made motor truck. It is true that the truck purchased was a high-grade article, but it was a product of the United States, and consequently 75 per cent. of the price paid (plus an exchange probably of 2¾ per cent.) by this manufacturer was sent to the United States, where it will remain and not likely again be spent in Canada.

The question of why a Canadian-made motor truck was not purchased, was discussed with this manufacturer, and he stated that so far as he knew, only one truck was made in Canada, and that truck was not at all serviceable enough to suit his requirements. He was informed that the Clydesdale, a truck of British design, was made in Toronto, Canada, and that it was not merely an assembly of United States material imported, but a truck made, with the exception of a few small units at present unobtainable in Canada, entirely of Canadian material, the product of Canadian manufacturers.

The Clyde Cars Company, Canada, Limited, were organized for the purpose of manufacturing Clydesdale trucks for Canada and the British colonies. They are, and have been, manufacturing trucks in Toronto actually, since last October. It has not been their policy to endeavor to popularize their product, purely on account of the fact that it was a product of Canada. All they expected was an opportunity to show their product, and then, being able to demonstrate the fact that the Clydesdale was equal to the best American product, have that preference given to it that should be given to it or a Canadian product.

A goodly number of Clydesdale trucks are in use in Canada and giving to their users utmost satisfaction. The Clydesdale has also been manufactured in the United States for the past four years, but more Clydesdales are in use in the United Kingdom and the British colonies than in the United States.

On account of labor conditions in England, an order is enroute to the Canadian plant for 100 Clydesdale trucks for the English market. These activities in the export field most certainly assist in the wide distribution of Canadian materials, and it would seem as though Canadian purchasers ought to go out of their way to patronize their Canadian industries.

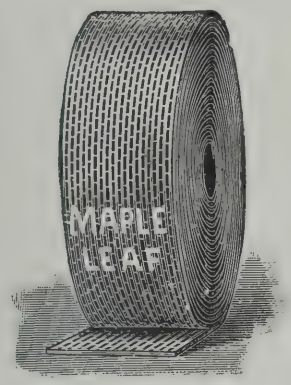
Formed Ottawa Branch

Builders and Contractors at the Capital Link Up with New Dominion Association

The Ottawa branch of the Association of Canadian Building and Construction Industries came into existence at a meeting of the capital's contractors and supply dealers in the Chateau Laurier on April 16th. Close to one hundred attended the meeting, and great enthusiasm was shown by those present who were in favor of organizing only as a branch of the Canadian Association. In the past years several associations have been formed by the Ottawa contractors, but interest in the local organizations gradually died out; however, their new formation promises to put the branch on the list of "live wires"; and it was the unanimous decision of the contractors at the meeting to get their branch on the active list by starting off with generous subscriptions to carry on the work.

Mr. J. P. Anglin, president of the Association of Canadian Building and Construction industries, and Mr. A. S. Clarson, general secretary, were present and assisted materially in the work organization.

Dominion Belting Co., Limited
Hamilton, Canada



SOLE MANUFACTURERS OF THE CELEBRATED

"MAPLE LEAF" BRAND

STITCHED COTTON DUCK BELTING—

STRONG DURABLE ECONOMICAL TRUE RUNNING

Being thoroughly waterproof it is equally good for running in wet or dry places. As a main drive belt, "MAPLE LEAF" cannot be excelled and for conveyors it is in great demand. A trial belt will convince you

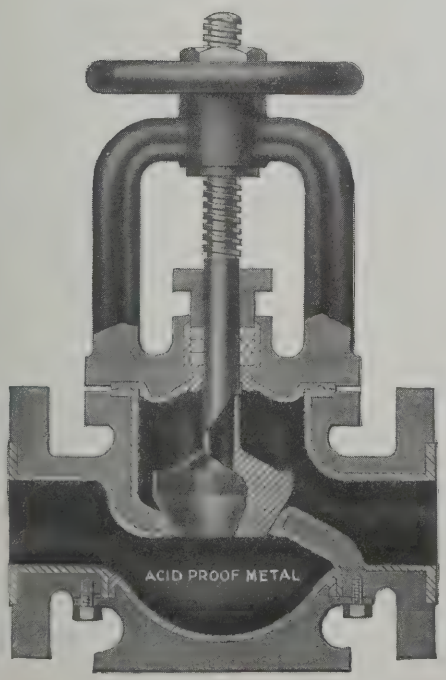
MAPLE LEAF BELT DRESSING

The Best for all kinds of Belts

WRITE FOR SAMPLE AND PRICES

Quebec Branch: 51 Duluth Building, Montreal

Acid Resisting Pump Valves



We wish to call your careful attention to our line of Acid Resisting Pumps, Valves and Fittings, they are absolutely perfect in detail. In price comparison with Acid Resisting Bronze Valves, etc., they make an enormous saving in your initial cost.

For lining Acid Tanks, Agitators, and Sulphite or Sulphate Vats, Hoyt's Sheet Metal will give far better service than the ordinary Chemical Sheet Lead in the market. If you will write us stating conditions under which your Sheet Lead is operating, we would be pleased to go into the matter fully and will convince you of the economy of Hoyt's Sheet Metal.

Write for Catalogue

HOYT METAL COMPANY

FACTORIES:

London, England; Toronto, Canada; St. Louis, Mo.
New York, N.Y.

New Tariff Regulations

Canadian Prohibited Exports

Those articles now prohibited from export under regulations of the Canadian Trade Commission are listed in a recent instruction issued by the Commissioner of Customs to Collectors. The regulations provide as follows:—

"1. For export to the United States, the United Kingdom, France (including Alsace and Lorraine), Belgium, Italy, Japan, and their possessions and protectorates, collectors of customs at ports of exit may, by endorsation of the usual shipper's export entries, license shipments of all commodities except the following:—Gold Coin, Gold Bullion, Fine Gold Bars, Canadian Silver Coin, Silver Bullion, Fine Silver Bars, Cinchona Bark and products, Quinine and its compounds, Cocaine, Opium, Opium Gum and its products, Wheat, Wheat Flour and Farina, Butter, Cheese, Sugars, Syrups and Molasses, Mill Screenings and Screenings of Grain, Canned Salmon.

2. Individual licenses shall be required for export of the following goods to all destinations:—Gold Coin, Gold Bullion, Fine Gold Bars, Canadian Silver Coin, Silver Bullion, Fine Silver Bars, Cinchona Bark and products, Quinine and its compounds, Cocaine, Opium, Opium Gum and its products, Wheat, Wheat Flour and Farina, Butter, Cheese, Sugars, Syrups and Molasses, Mill Screenings and Screenings of Grain, Canned Salmon.

3. Individual licenses shall also be required for all prohibited exports to destinations other than the United States, the United Kingdom, France (including Alsace and Lorraine), Belgium, Italy, Japan, and their possessions and protectorates.

4. Applications for licenses to export the various forms of gold and silves above mentioned to be addressed to the Deputy Minister of Finance, Ottawa.

5. Applications for licenses to export wheat to be addressed to the Chairman, Board of Grain Supervisors, Winnipeg.

6. Applications for licenses to export all other other goods to be addressed to the Canadian Trade Commission, Ottawa.

7. Shipments of goods on the prohibited list, when the value of no one commodity exceeds $100, may be licensed by the endorsement of the collector of customs at the point of exit on the usual shippers' export entry.

8. In the case of shipments by parcel post when the value of no one commodity exceeds $100, postmasters may accept same for transmission without license."

Board of Customs Decisions

Die blocks and similar hammered or forged materials of steel, declared to be dutiable under tariff item 393. The general tariff rate under item 393 is 30 per cent. *ad valorem.*

Formaldehyde, per sample, declared to be dutiable under tariff item 219 (*a*). Under item 219 (*a*) the general tariff rate is 25 per cent. *ad valorem.*

Vegetable scoops, with tines closed by cross bars at outer end, per illustration, declared to be dutiable under tariff item 450. Under item 450 the general tariff rate is 32½ per cent. *ad valorem.*

Departmental Rulings

"Japanole" black stain from Restorff & Bettmann, used as a leather dye, found to be alcoholic, and therefore dutiable at $3 per gallon plus the war tax under tariff item 156.

The following articles for the equipment of ships and vessels are manufactured in commercial quantities in Canada:

BLACK AND GALVANIZED.

Pipe turn buckles from ½ inch to 2 inches, inclusive.

Pulley blocks, wood or iron, single, double and triple, up to 16 inches in diameter.

Anchor shackles, screw pin or plain cotter, ¾ inch to 1⅜ inches, inclusive (diameter of pins).

Waste sulphite liquor, condensed, ruled to be dutiable at 17½ per cent. under tariff item 711.

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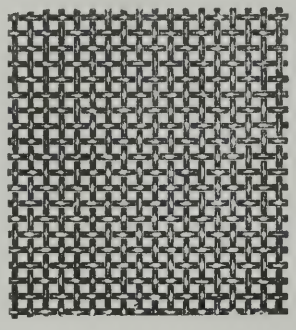
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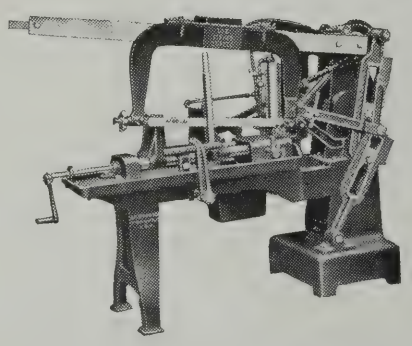
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Canadian Factory: Hamilton, Ontario

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Fibre chair seats, curtain stretchers and curtain poles ruled to be dutiable at 30 per cent. under tariff item 519.

Under Customs memo. 2307-B, the war tariff of 7½ per cent. on imported articles will no longer apply on foreign excise duties. The ordinary Customs duty (not war tax), however, will apply as heretofore on the fair market value as sold for home consumption, including excise.

Bronzing machine ruled to be dutiable at 27½ per cent. under tariff item 453.

Exports to Great Britain

In the April number of INDUSTRIAL CANADA announcement was made that the British authorities had removed all restrictions on importations into the United Kingdom of goods which are exported from and are the produce or manufacture of the Dominion of Canada, except

(*a*) Gold or articles containing gold, except when consigned direct to the Bank of England;
(*b*) Spirits, other than brandy and rum;
(*c*) Hops.

The Canadian Trade Commission, under date April 22nd, advise that the United Kingdom import restrictions have been removed from spirits, and from articles made of or containing gold, provided the same were produced in and exported from British Dominions. The Canadian Trade Commission state that the only article now remaining on the British import restrictions against Canada is hops.

Our Industrial Opportunities

("Charlottetown Guardian")

In deploring the want of industrial activity in this province we are too liable to overlook the industries we already have; too liable also to reach out after too many and too comprehensive undertakings. We already have quite a respectable number of industries but the extreme modesty characteristic of our captains of industry has held a veil over these that has prevented the public from knowing very much about them.

It is known perhaps only to a comparative few that we have in Charlottetown a canning plant the annual turnover of which is, on an average, $100,000; that has a plant capable of putting up 500 cases of small fruit daily; that last year put up 10,000 cases of 48-pound cans each of vegetables and beef; that during the past season, October, November and December packed one hundred tons of poultry, about one-third of the whole poultry output of the province and for which it paid to the farmers $43,000. This industry employs thirty to thirty-five hands and pays about $12,000 a month in wages. We refer to the canning and packing plant of Mr. J. D. Jenkins.

Mr. Jenkins has been in this business for about ten years. He began in a modest way, in a small shop, slowly added to his plant as required, slowly extended his business by adhering strictly to his original determination to put up the best quality possible, and to pay a reasonable price for his raw material.

Under present conditions this factory is working at capacity only a few months of the year; it could be kept going the year round by adding a number of other possible lines, such as the canning of apples, of which we can produce an abundance of a quality unexcelled anywhere; the canning of pumpkins, which we can grow by the ton, in odd corners of our farms and for which there is an unlimited market.

This factory has an up-to-date plant, with a capacity of 500 cases or more daily.

In casting about for possible industries along agricultural lines, here is a model from which the Industrial Development Committee can obtain valuable information; can possibly find a means for extension and investment. In any case it affords ample proof of the claim so frequently made that there are many possibilities for industrial development along agricultural lines in this province.

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Good Things from Other Magazines

The Permanency of Present High-Price Levels

The writer of the following illuminating article, who is professor of political economy at Yale University, does not believe that there will be an immediate recession to pre-war prices, as the world is now on a high-price level. The clever business man, he declares, is not he who waits, but the one who carefully studies the new economic, financial and industrial conditions, and acts accordingly

By PROF. IRVING FISHER

(From the "Manufacturers' News")

AT the present time there is a marked halt in production. Industry is slowing down. Unemployment of labor increases. Some industrial concerns are failing to earn profits, and others are suffering the dissipation of their accrued profits, because even by shutting their plants down, they cannot save certain of their expenses or any of their fixed charges. The government's revenues, dependent as they are upon the national income, may fall short at the very time we need them most. In brief, we are threatened with a widespread business depression and from peculiar causes, for the unsound conditions usually preceding a widespread business depression are absent.

Expect Prices to Drop

The main reason why business is not going ahead better is that most people expect prices to drop. The merchant is selling, but not buying. The manufacturer holds up purchase of his raw materials. People quote the disparity between present prices and those prevailing "before the war" and decide they will not buy much until present prices get down to "normal." This general conviction that prices are to drop is putting a brake upon the entire machinery of production and distribution. Readjustment waits because we keep on waiting for it. We have waited in vain for over three months. It is interesting to observe that many manufacturers think that prices must come down, including the price of labor, but they are ready to demonstrate to you that their own prices cannot come down, nor can they pay lower wages. Almost everything they buy somehow costs twice as much as before the war, and their labor is twice as dear. They cannot pay their labor less, if labor is to meet the increased cost of living. Now, as a matter of fact, when we investigate almost any individual one of the so-called "high prices" for industrial products, we are likely to find that individually it is not high, that is, it is not high relatively to the rest. Our quarrel is with the general level of prices.

Variations in the general level may be compared to the tides of the sea, while individual prices may be compared to waves. Individual prices may vary from this general level of prices for specific reasons, peculiar to individual industries, just as the height and depth of waves vary from a general level established by the tide. The causes controlling the general price level are as distinct from those controlling individual prices as the causes controlling the tides are distinct from those controlling individual waves.

All prices have risen, but some have risen more, some less, than the average, for particular reasons affecting each industry. In some cases an improved organization of both employer and employees has enabled them to take full advantage of the price advance. The war brought about an abnormal demand for certain products like copper and steel, and they advanced faster than the average. The abnormal demand having disappeared, these prices are being adjusted downward. Wheat is a case where demand increased and at the same time certain of the usual sources of supply—Russia, Australia and Argentine disappeared, with a resultant abnormal price increase. The closed sources of supply have opened again and wheat prices in the world market have dropped. In some cases, as in many of the industries making building materials, the war meant a great slackening in demand, an enforced curtailment in use by government order. In such instances, we are likely to see an upward swing of prices as the suppressed demand again makes itself felt. To-day we are witnessing throughout the country such price readjustments, up and down, but the general price level has shown little signs of falling.

The fundamental practical question confronting business men is whether the general level of prices is going to fall. In my opinion, it is not going to fall much, if at all. We are on a permanently higher price level and the sooner the business men of the country take this view and adjust themselves to it, the sooner will they save themselves and the nation from the misfortune which will come, if we persist in our present false hope.

A similar increase in prices all over the world occurred between 1896 and 1914 following the discovering of the rich gold fields of South Africa, Cripple Creek and Alaska, the invention of the cyanide process in mining, and the vast extension of the use of bank credit.

Startling Extension of Credits

Circulating credit, that is, bank deposits subject to check and bank notes, is a multiple of the banking reserve behind these deposits and notes, and the essence of this reserve of gold. Our present monetary system is an inverted pyramid, gold being the small base and bank notes and deposits being the large superstructure. The superstructure grows even faster than the base. The deposits are the important elements. They are transferred by check from one individual to another, that is, the circulation of checks is really the circulation of deposits.

Thus any increase in the country's gold supply has a multiplied effect. The possible extent of the effect is dependent upon (1) the amount of gold available, and (2) the gold reserve requirements determining the volume of credit that can be put into circulation based upon gold. Over a billion dollars in gold has come into this country from abroad since 1914, and a large amount has disappeared from domes-



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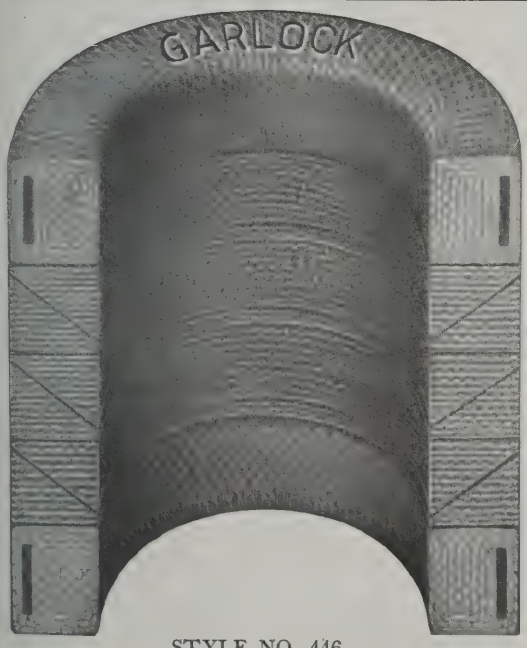
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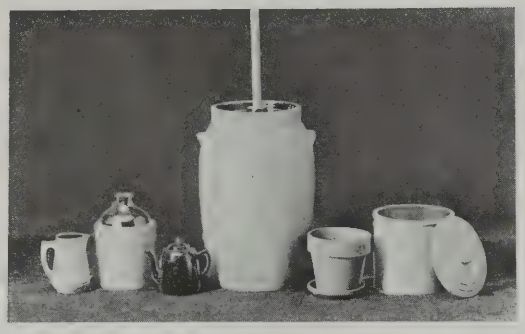
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TORONTO *CANADA*

tic circulation. The gold from both these sources has found its way into the United States treasury and into bank reserves. On June 30th, 1918, the portion of the gold reserve of the federal reserve banking system which supported national bank deposits and federal reserve notes was more than three times as large as the gold reserves under the old national banking system on June 30th, 1914—$1,786,000,000, compared to $592,000,000. During the same period, credit instruments (demand deposits and notes) increased about twofold—from $6,100,000,000 to $11,700,000,000. This increase of credit instruments is typical of the banking situation for the country as a whole, and largely explains the present higher level of prices. The increase of gold has been so great, however, that the base has grown faster than the superstructure—which is contrary to the normal tendency. The ratio of gold to credit has risen from 9.6 per cent. to 15.3 per cent. The reserve requirements of the present system are such that for 1918 there is an excess of gold above legal requirements of more than $700,000,000. The reserve required by law to support the $11,700,000,000 of credit instruments of 1918 is $1,070,000,000. The $700,000,000 of free gold could support an additional superstructure of 70 per cent. as large as the existing one, which indicates that for the banking of the country as a whole, a potential future expansion of 50 per cent. is a conservative estimate.

Erroneous Views of Inflation

Many people, referring to this inflation in the circulating medium, and assuming that it is temporary, are waiting for that inflation to subside. When we speak of inflation, we mean more circulating medium than is needed to transact the business of the country on a given price level. But what price level? Some people mean the price level of 1913-1914. Our currency is certainly inflated in terms of the prices of that period, just as the currency of 1914 was inflated with respect to the prices of 1896, but our currency is not inflated at the present time relative to the new level of prices in the world which the war has brought. The country's volume of money will have to be judged in terms of this new price level, not in terms of a price level that is past. To speak of the present "inflation" as temporary is to assume the very thing about which we are contending—to assume that the normal prices are those of 1914.

Let us examine the factors upon which any future price movements must depend.

1. *Gold Will Not Return to Circulation*:

No great effect in the direction of falling prices can be expected from any return of gold and other lawful money into daily circulation. Such a reversion would be contrary to monetary experience everywhere. When people have learned to leave their gold and silver in the banks and use paper money and checks instead, they find the additional convenience so great that they will never fully return to the old practice.

2. *No Great Outflow of Gold Through International Trade:*

It should be noted that many of the former reasons for a flow of gold from America abroad have disappeared. We used to owe Europe a huge balance of interest payments upon American securities she held. The situation is reversed to-day.

"Yes," but people say, "wait until trade is resumed between United States and Europe, then surely 'low priced European goods' will flow over here in such enormous volume that they will liquidate all annual obligations to us in goods." Ultimately, Europe must pay her obligations to us in goods, but it will take many years. Meanwhile, she

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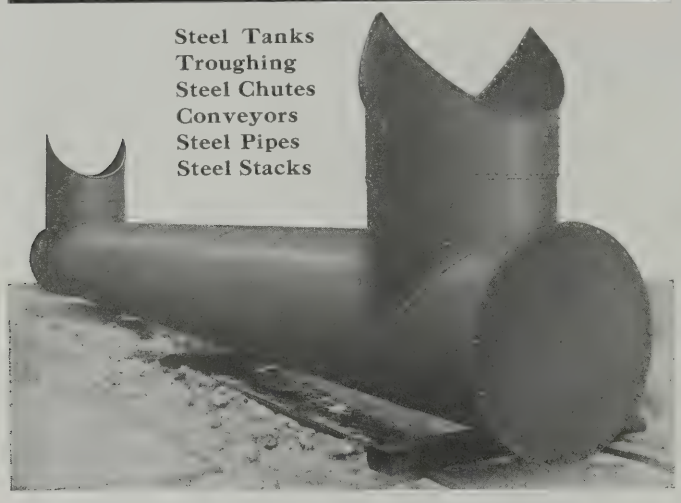
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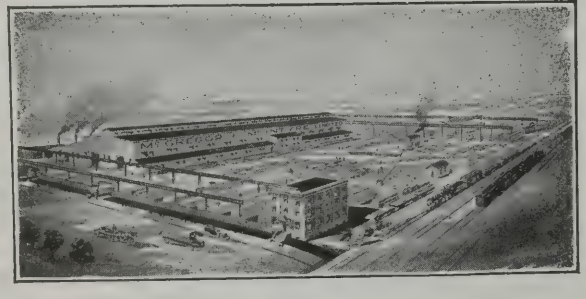
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needs our tools, machinery and raw materials for immediate reconstruction.

At the present time European goods are not "low priced" (however little the money wages of European labor will buy). Prices in Europe since the war began have risen more than they have in the United States. The price rise has been less the further from the seat of hostilities. It was least in Australia and New Zealand. It was next least in the United States, Canada and Japan. Then came neutral Europe, then our present allies; and finally, Germany and Russia. Gold tends usually to flow from high priced countries to low priced countries, so that until "inflated" European prices fall, gold is not likely to flow thither. Prices are no more likely to fall there than here and for the same reasons, which will be explained below.

3. *Reduction of Outstanding Credit:*

The chief dependence of those who predict lower prices is on a reduction of the superstructure of credit resting upon our gold rather than on any reduction in the volume of this gold itself. They look for a contraction of bank credit, a reduction in the volume of deposits subject to check, which circulate throughout the country.

Effect of Loans on Credits and Prices

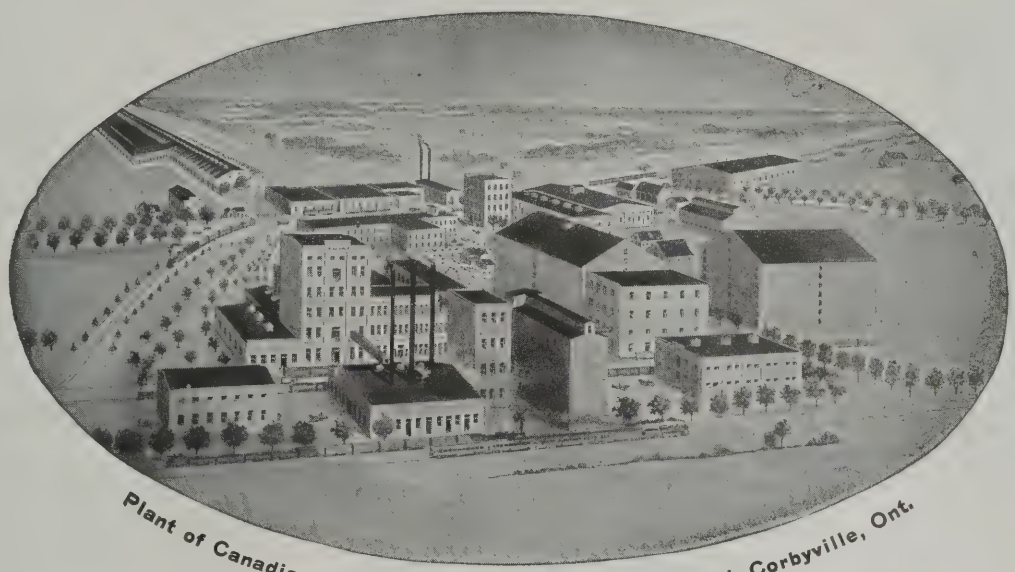
But the main cause for the present extension of bank credit is the Liberty Loan, and there is soon to be another. Subscribers for the new loan will not pay for their bonds in full any more than they did in the previous cases, but rather less. Many of them will deposit the bonds with the banks as security for loans to be repaid later. The effect on our circulating medium will be the same as if the government were to impose a levy of six billion dollars of credits upon the federal reserve banks and then order them to apportion these credits out among the banks of the country. This process will certainly lead to an expansion of credits. The former issues of Liberty Bonds are still carried by the banks to a considerable extent.

It may be contended that the bank credit expansion represented by the new Victory notes has already occurred in the form of treasury certificates, which are merely to be funded by the Victory notes. The Victory note issue thus represents only a shifting of the obligation to pay credits advanced to the government, a shifting from the shoulders of the banks to the shoulders of the Victory note buyer. The volume of outstanding bank credit remains the same. To a certain degree this contention is true. But a portion of the April victory note issue will go to pay future expenditures, not accrued expenditures. Then, as soon as the government needs additional money, it will issue new treasury certificates, resulting in new extension of bank credit. Moreover, there is little doubt that there will be at least one more government bond issue during the reconstruction period, and this will tend to further increase our present credit structure.

Foreign Borrowings Have Same Effect

The banks must lend credit and create deposits to meet the expenditures not only of our own government, but of foreign governments as well. The same thing results even if these governments are served directly by private investors here, instead of via the United States treasury. These investors pay for foreign government bonds as they do for our Liberty Bonds, on the installment plan, paying a small part down and borrowing the rest from the bank. This increased purchasing power will be mostly spent in this country for supplies to be sent abroad for rehabilitation. This continuance of vast loan issues, connected with war and reconstruction throughout the world, is a factor which will maintain the high price level temporarily, which means many months.

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Plant of Canadian Industrial Alcohol Company Limited, Corbyville, Ont.

With a capacity of 450,000 (proof) gallons per month we are the largest producers of Alcohol in Canada.

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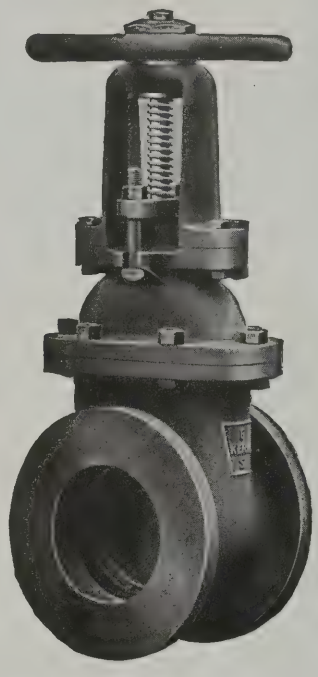
Those who are using Duty Paid Alcohol in their manufacturing processes would do well to consult us with a view to using it "In Bond," thus avoiding the use of two-year-old Alcohol. Under the rules and regulations of the Department of Inland Revenue, newly made Alcohol may be used "In Bond." This Alcohol is much cheaper than two-year-old.

METHYLATED SPIRITS or Denatured Alcohol is sold only by the Department of Inland Revenue, Ottawa, Ont., but any other kind of Alcohol may be secured from us.

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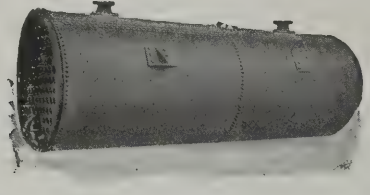


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It is also worth keeping in mind that Liberty Bonds and other government securities held here do not wholly cease being a source of credit expansion when the individual subscribers have completed their payments on the bonds and really own them. For these new bonds are unrivalled security for further borrowing from the banks for commercial purposes.

The availability of the vast issues of war bonds as bases for future credit expansion, coupled with the fact that our banking system has still many unused reefs, sure to be taken out later when business wishes to spread more sail, is the chief reason why prices will keep up permanently, that is, for many years.

Between the period of temporary and the period of permanent effects, there may be a slight dip in the price level, say a year from now. If so, it is the more incumbent upon business to proceed now; for it cannot wait a year.

During the war the flotation of stocks and bonds of commercial concerns has been very greatly diminished. During the period upon which we are now entering, the issue for such securities will increase greatly.

Business Opposed to Credit Contraction

Against any considerable reduction in bank credit, and hence in the general level of prices, we shall find the whole business community in arms. Falling prices mean hard times for the individual and for the nation and every one resists the tendency. At the end of the Civil War, the Treasury started to reduce the quantity of greenbacks. A start had hardly been made, however, before the business depression of 1866 and 1867 caused Congress to forbid by law any further reduction. Should the Federal Reserve Bank attempt, by raising the discount rate or otherwise, to reduce the volume of bank credit outstanding, they will meet with the same sort of opposition. Moreover, the hostile attitude of labor toward the lowering of wages will deter legislators and bankers from any organized policy of contraction.

Business men should face the facts. To talk reverently of 1913-1914 prices is to speak a dead language to-day. The buyers of the country, since the armistice, have made an unexampled attack upon prices through their waiting attitude, and yet price recessions have been insignificant. The reason is that we are on a high price level, which will be found a stubborn reality. Business men are going to find out that the clever man is not the man who waits, but the one who finds out the new price facts, and acts accordingly.

New Canadian Patents

A List of Some of the Recent Inventions for which Patents have been Issued

The following is a list of Canadian patents recently issued through the agency of Messrs. Ridout & Maybee, Kent Bldg., Toronto, from whom further particulars may be obtained:

James C. Cockburn, animal trap; John Fraser, churn; Thomas D. Kelly, planes for aeronautical machines; William P. Perry, apparatus for distilling; Paul Wilde, plants for warming and moistening the soil surface; John West and Wm. Wild, retorts and methods of working the same; Sigmund Willner, accumulator electrode-grids; Toronto Type Foundry Co., Limited, universal tool grinding machine; Nels A. Anderson, buckling devices; J. Stone & Co., Limited, valves for fluid pressure sytsems for operating bulkhead and like floors; Edward P. Leach, concrete mixer.

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RESOURCES OF LATIN AMERICA

Forests of South America probably contain the largest and most valuable body of timber in the world. Every care should be taken for the future to protect these regions from possible destruction. If properly protected and utilized, South America may become the centre of the world's timber prosperity in the immediate future.

By PERCY F. MARTIN, F.R.G.S.
(From British & Latin American Trade Gazette.)

The twenty sovereign states of what is known geographically as Latin America are possessed of natural resources—as distinct from manufactured products—of which the world has but an imperfect knowledge, and makes but a restricted use. A country, or a series of countries, with a superficial area of something over 8,000,000 square miles, must, necessarily, contain within its borders a vast number of natural resources of different kinds and various degrees of usefulness to man; and even to-day the inhabitants of those regions are ignorant of the riches a bountiful Providence has bestowed upon them or how to put them—where known—to the most profitable advantage. Whereas to several of the countries many of these gifts are common—such as timber, minerals and precious stones—others are possessed of resources peculiar to themselves; for instance, the nitrate of Chile, the gayule of Mexico, and the quebracho of Argentina and Paraguay.

The war has taught us many useful and profitable lessons, which is capable of employment by means of new devices and discoveries may be obtained. From among the resources of the severe competition, due to the needs of the different nations, will call for the uttermost adaptation of these resources, and the eyes of the universe will turn towards the immense and diversified regions of South and Central America, where practically everything that man can need for his own use, and which is capable of employment by means of new devices and discoveries may be obtained. From among the resources of the Latin Americas it will be possible to meet the growing demands of the entire world, and then to have touched but the bare fringe of their productiveness.

Composition of Forests

Let us consider the case of the forest-lands, a conspicuous feature in the majority of the Latin American states. If we except two small regions, the South American forests are composed of broad-leafed hardwoods. There is a close resemblance between these and the hardwoods of North America. Some are of between 10,000 and 20,000 feet board measure to the acre, and the common belief that tropical forests contain only very hard woods must be disabused, since recent investigations show these forests to be composed of soft or medium hardwoods which are as suitable for general construction as the pines and various conifers and hardwoods of North American and European forests.

The timber lands of Latin America—in which comprehensive term are included those of Central America and Mexico—can be roughly divided into four categories, more or less distinct, the species composing each varying from region to region, but the general effect of each type from Colombia to Argentina being much the same. Putting aside the employment of technical or botanic phraseology, these four principal types of trees may be described as dry forests, temperate forests, swamp forests, and tropical rain forests. There are, of course, other and minor types, quite distinct in themselves, upon which further comment is unnecessary, since the object of this article is merely to show the character of the

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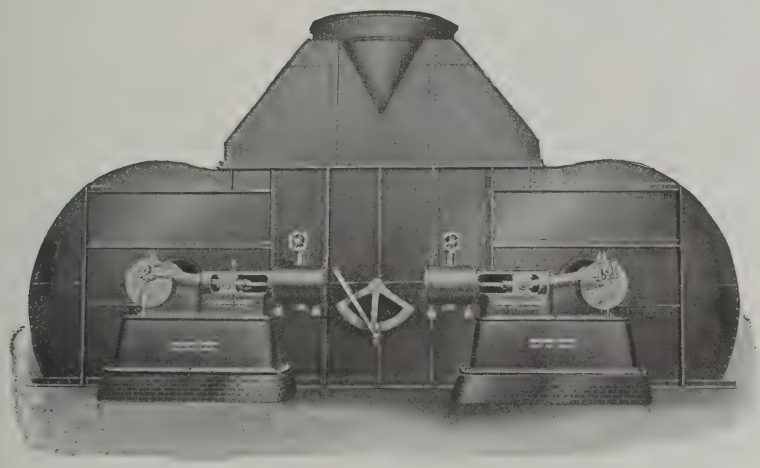
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South American forests so far as they lend themselves to commercial exploitation.

The first or dry type of timber is to be found in the temperate or sub-tropical regions, and is met with at both high and low levels. Immense areas exist where the rainfall is either deficient or unevenly distributed throughout the year, thus occasioning long periods of drought. Such forest areas are usually covered with some form of growth which, at its best, is a dense mass of comparatively few species. The trees are short-boled, round-headed, often armed with spikes or thorns or short spur-like branches, and with harsh or bristle-pointed leaves. The trees do not usually exceed 50 feet in height, and in many regions the average is little over 25 feet. The commercial stem varies from 10 to 20 feet, with diameters of 12 to 24 inches common. These forests grade into chaparral on one side, and into tropical rain-forests on the other. Perhaps the best known representatives of this type are the *quebracho-algarroba* forests of Northern Argentina and Paraguay. These occupy the great semi-arid plain lying between the foot-hills of the Andes and the Paraná and Paraguay rivers, known geographically as the Gran Chaco. Other representatives of this type are the *Cotinga* forests of Brazil, and the coast forests of Colombia and Venezuela between Cartagéna and the Island of Trinidad.

Antarctic Beech and Conifers

The second, or temperate, type is met with along the slopes of the Andes, where elevation and moisture combine with suitable soils to make the growth of a temperate forest possible. This type is best developed in Patagonia, and reaches practically to sea-level in Tierra del Fuégo. Here, in the south, the trees are rather stunted and deformed by the violent winds that blow for the greater part of the year, but higher up in the more peaceful solitudes of the mountains to the north, and along the shores of the Patagonian Lakes, timber reaches a splendid development, and heavy stands are met with. These forests are of Antarctic beech and a few conifers, and it is estimated that three species of the beech would probably furnish 90 per cent. of the cut. Average stands are between 10,000 and 20,000 feet per acre, exclusive of defects.

Unfortunately, many of the forests are overmature and so defective as to be of little commercial value. The trees reach heights of 100 and 125 ft., and a diameter of between 2 ft. and 5 ft. No reliable computation has ever been made of the timber in this part of South America, and the extension along the Andes from Chile to Colombia can only be roughly estimated. The great populations that have for some thousands of years occupied this region, drew on the forests for fuel and construction-timber, and, no new growths having been promoted, only second growth, or scattered patches, remain. It has been found that these Highland people even worked down to the edges of the rain forests of the great Amazonian plain.

The third, or swamp, category forest can, again be subdivided into two classes: (*a*) The tropical forests occupying the salt-water swamps at the mouths of the great rivers; and (*b*) the forests of the fresh-water swamp and bottom lands. The tidal forests are typical mangrove areas, such as are to be found in other parts of the world, rather restricted in area and practically destroyed. The fresh-water swamps occupy great areas, and may undoubtedly, one day, become of some commercial importance. Among the best-known representatives of this type may be included the lowland forests that fringe the Amazon River in Brazil, the Orinoco in Venezuela, the Paraná in Argentina, and the Magdaléna in Colombia. These forests have similar characteristics, al-

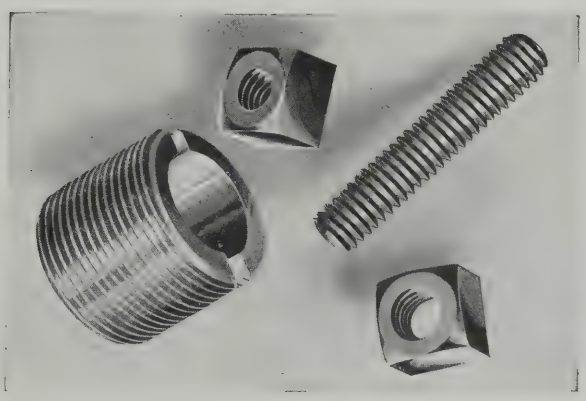


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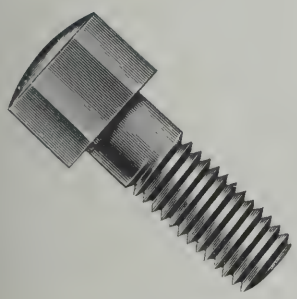


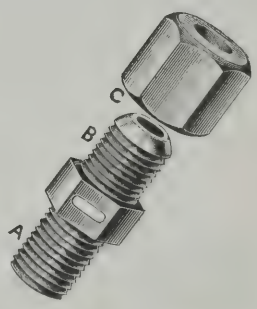




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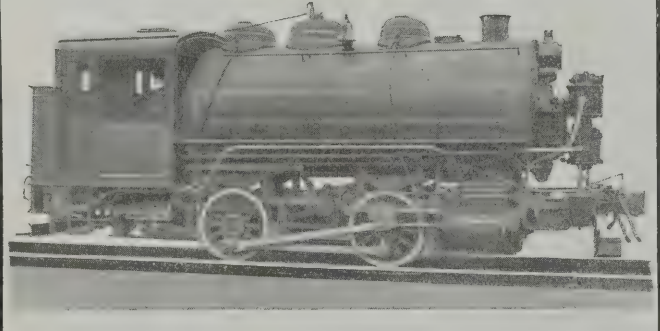


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though they may differ in regard to the species of the trees found therein from north to south.

The forests of the swamp area are very irregular in age, often very open, and, maturing with extreme rapidity, only fast-growing species obtain a footing over much of the area. For the most part, the species in this type are soft wooded, similar to cotton-wood, bass-wood and yellow poplar, and many are quite colorless. The trunks reach to a height of over 100 ft. in the best soil, and from 60 to 70 ft. in the average, the ordinary diameter being between 2 and 3 ft. Certain of these species probably reached this height in a period of from 10 to 15 years, and their commercial diameters in much the same time. The dominant stand from any given region is generally of very few species. In many cases four or five varieties of a tree will furnish 75 per cent. or more of the commercial timber, and the yield will be between 8,000 and 10,000 ft. per acre.

Of all the types of South American forests the tropical rain forest is, perhaps, the most important and the least known. Here in these regions, almost untouched by the foot of man, are to be found mahogany, rosewood, Spanish cedar and numerous other classes of wood adaptable to commercial purposes. It is estimated that there is enough timber to keep thousands of lumber men at work without pause for hundreds of years, not even the Indians having, as yet, penetrated more than a mile or two into the jungle-like interior from the waterways.

This forest type in South America probably contains the largest and most valuable body of timber in the world, and, had shipping facilities permitted, vast stocks of some of the finest construction timber—and timber for pit props in particular—could have been brought over to Europe during the past four years, during which the scarcity of such material had been so keenly felt. Every care ought to be taken for the future that these regions be protected from possible destruction, and some kind of international agreement arrived at between European, North American and South American Governments for the institution of a strict forest administration. If these areas be destroyed, as the forests of Argentina, Paraguay and Southern Brazil are being wasted day by day, it would mean economic ruin, probably also absolute physical damage to land, climate, property, and even life on a great part of the southern continent. If, on the other hand, they are protected and properly utilized South America may become the centre of the world's timber prosperity in the immediate future.

The tropical rain forests are composed of timber similar to that now generally in use. The woods are in the main soft or of medium hardness, and could replace yellow pine for construction, oak for finish and furniture, hickory for wheels and handles, and ash for agricultural implements. It has been said by a great authority upon timber, that from the infinite variety of these South American woods it is possible to find one for each industry more completely suited to its needs than those used to-day.

In working the forests, almost everything would seem to be in favor of the logger, conditions being almost ideal. Heavy stands are found over great areas absolutely level, and between ten and twenty thousand feet can be cut to the acre. Commercial diameters run between 2 ft. and 3 ft., and the clear lengths to 50 ft. or more. The total height of an average tree is well over 100 ft. In regard to transportation, navigable rivers and streams reach nearly every part of the forest, and short hauls to floatable water are the rule. While much of the timber will float, it would probably be found more practicable and profitable to construct complete wood-working plants close to the forests, dispose of low-grade products near at hand, and ship only the more or less finished products to the world's markets.

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WHITLEY INDUSTRIAL COUNCILS

The scheme, explained by its originator in the following article, recommends the formation of a triple joint organization—in the workshops, the districts and nationally. The functions of the various committees are described in some detail and an illuminating preface to the constitution and rules of the Industrial Council for the Building Industry is quoted.

By Rt. Hon. J. H. Whitley, M.P.
(From the "London Daily Mail.")

The National Joint Industrial Councils, over whose inception I had the honor to preside, have now been established in twenty-five trades. Interim Industrial Reconstruction Committees, which fulfill the same function industries whose progress towards Joint Standing Industrial Councils has been through various reasons delayed, have been set up in twenty-five other industries.

The Municipal Corporations Association have agreed to apply the scheme not only to trading departments such as gas and tramways but also to their non-trading administrative departments. Already some three and a half million workers are organized under the scheme. Its extention to other industries is proceeding rapidly. When all have become organized, we may hope to form a real Industrial Council which will permanently fulfil the functions now being temporarily attempted by the Industrial Peace Conference summoned by the Premier.

Already the scheme is producing excellent results, not only through the National Councils but also through the District Councils and Works Committees. They are giving a new status to trade unions and to the workers. They are stimulating the workers' pride and interest in their calling. They are providing scope for the young men with ideas and ideals, the young men who are causing what is called "industrial unrest." Unrest is a sign of health. Unrest is an essential condition of progress, if only it is frankly given a constructive outlet. Unrest convoked the committee which has come to be associated with my name and inspired its effort to evolve a new and better industrial order.

The committee were asked to advise the Government on two points:

1.—To make and consider suggestions for securing a permanent improvement in the relations between employers and workmen.

2.—To recommend means for securing that industrial conditions affecting the relations between employers and workmen shall be systematically reviewed by those concerned, with a view to improving conditions in the future.

Getting the Workers' Interest

The committee unanimously decided that the best way to secure the desired improvement in relations between employers and workpeople was to establish the machinery for systematic review of industrial conditions "by those concerned."

The scheme recommended by the committee is not rigid; each trade is asked to adapt the general principles to its own needs. Joint Standing Industrial Councils are recommended to bring employers and workpeople together in regular meetings for discussion of matters of common interest. These meetings, we thought, would "produce an atmosphere in which disputes when they arose could be settled by an appeal to reason." They would tend, we believed, to reduce to a minimum the suspicion which the Prime Minister rightly described the other day as the chief cause of misunderstanding and antagonism.

The problems with which the Industrial Councils are invited to grapple with are the regularization of employment, industrial training, utilization of inventions, industrial research, the improvement of design and quality, and legislation affecting workshop conditions.

These matters in the past have been left in the main to the employers, and we felt that the knowledge and experience of the people actually engaged in industry constituted an asset of immense value and practical usefulness which ought no longer to be wasted. Furthermore, we thought that the workpeople were rightly entitled to some share of control over the conditions of their work and that such share of control must inevitably induce a wider interest in their work, a greater sense of responsibility, and a more active co-operation between managers and manual workers in the promotion of industry.

The scheme accordingly recommended is to form a triple joint organization—in the workshops, the districts, and nationally. The function of the works committees is to issue and revise works rules, arrange the distribution of working hours, regulate piece prices, settle methods of wage payments, adjust shop grievances, and deal with such other matters as holidays, physical welfare, questions of discipline, terms of engagement, training of apprentices, technical library, suggestions for improvements in methods, investigation of causes tending to reduce efficiency, collections for clubs and charities, entertainment and sport. The District Councils are to consider matters of interest to their district and to take executive action with regard to them, to co-ordinate local workshop practice, and to make recommendations to the National Joint Industrial Council on any matters which they are unable to decide.

Eliminating Conflict

As to the purpose of the National Councils and the scheme as a whole, I cannot define them better than by quoting from the admirable preface to the constitution and rules of the Industrial Council for the Building Industry.

"By general consent the old system has proved itself unworthy, and the reasons for its failure are not far to seek. From the days of the industrial revolution the relations between employers and employed have been based upon antagonism, coercion, and resistance.

"Under such a system many a forward move on the part of Labor towards improved conditions is opposed almost as a matter of duty by the employers' associations, and, conversely, many improvements in the direction of increased production and efficiency are countered by the restrictive regulations of the trade unions; both sides acting, as they believe, in the interests of their members.

"The two sides rarely meet except to make demands of one another or to compromise conflicting claims, and negotiations are inevitably carried on as between two hostile bodies. In this way great powers of leadership and willing service are diverted from constructive work into the sterile fields of largely useless controversy.

"Industrial peace must come, not as a result of the balance of power, with a supreme court of appeal in the background; it must arise as the inevitable by-product of mutual confidence, real justice, constructive good will. Industry needs no truce, no compulsory arbitration, no provision for postponement of disputes.

"What it needs is confidence and a courageous forward movement, supported by the constructive genius of both sides in common council. No one engaged in constructive work can fail to respond to the tremendous call of the big job, and the task to be faced to-day is the greatest problem in social engineering that the world has ever seen.

"It is believed that the common interests of industry will be found to be wider and more fundamental than those which are still, admittedly, opposed; and it is upon the broad basis of these common interests that the fabric of the new industrial order may be confidently raised."

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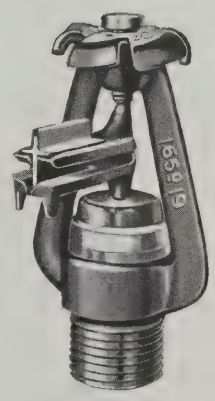
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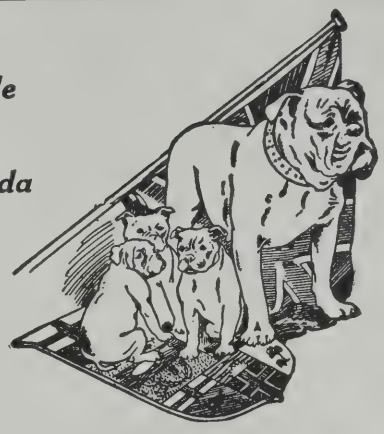
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THE WAR FOUNDLINGS OF INDUSTRY

Now that peace is in sight and trade competition promises to be restored, the question arises as to what shall be done with the newly-established industries which were brought into being to provide essential commodities, the supply of which from enemy countries was cut off by the war. Reasons why they should be maintained.

By WILLARD M. KIPLINGER.
(From "The Nation's Business.")

But of returning peace conditions has grown the question, What shall we do for our essential industries? Most are strong and healthy, and need no special Governmental consideration. Others are war babies, born of urgent necessity in times of industrial stress. Some of these must either die or be nurtured, now that old conditions of trade competition are soon to be resumed. In days of war, when the nation's interests were more homogeneous, when industries were compelled to depend more fully on the country's resources without aid from other lands, efforts were made to develop and cultivate what have since become known as "key" or "pivotal" industries. Dyes, optical glass, knitting machine needles, steel alloys, and certain drugs may be mentioned as typical examples. Each now is confronted with the vital question of whether the nurturing is to be continued, and inasmuch as tremendously big industries depend on these small enterprises the question is equally vital for the nation.

Of course, iron and steel manufacture, coal mining, textile and machinery production, railroad transportation and agriculture are examples of the nation's truly essential industries. Our social organism simply would not live without them. But neither would they live without the unobtrusive, but no less essential pivotal industries.

Many of these pivotal industries are not war infants, and many industries developed during and because of the war certainly can not be considered worthy of Governmental protection. So it is no simple task to separate the war babies, which should be kept in economic incubators, from those which will thrive in the open air of free competition. It is a delicate job to determine the enterprises not truly important to our big industrial family and which consequently might decline without serious effects. British economic experts went to work on the question more than a year ago, in their Committee on Commercial and Industrial Policy After the War, and recently reported:

"There are certain special commodities which, while the branches of industry engaged therein are not of such magnitude, are essential to national safety as being absolutely indispensible to important British industries, and were supplied before the war entirely or mainly from present enemy sources or from sources under present enemy control."

Under this definition, the British committee decided its national key industries, requiring special treatment, included those producing synthetic dyes, zinc, tungsten, magnetos, optical and chemical glass, hosiery needles, thorium nitrate for manufacture of incandescent gas mantles, limit and screw gauges and certain drugs.

But key industries for Great Britain are not necessarily key industries for the United States. No Governmental or other authorized agency has attempted to say what are the key or pivotal industries needing special treatment here. But most students of current economic conditions agree that in this class fall the manufacture of dyes, optical and chemical glass, needles for knitting machines, and a number of medicinal materials.

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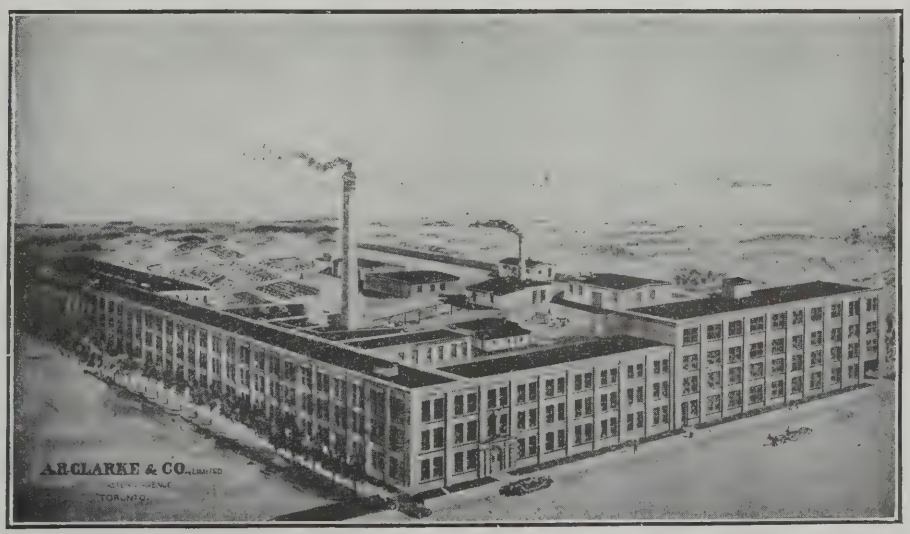
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along our streets. If we had to wear natural-color fabrics—and this means white clothes, probably dirty white—we would postpone buying clothes out of sheer dislike for the lack-lustre materials. Therefore a dollar's worth of dye sells ten thousand dollars' worth of suits, dresses, rugs, curtains, paint, wall paper, and printed books.

To judge the importance of the dye industry by the value of its output would be like measuring the value of American newspapers at two cents the copy, or the production of sermons at fifty cents the auditor, or the worth of a front tooth at the current market price for porcelain.

Consumption of optical glass forms an infinitesimal fraction of the whole output of glass in this country. Yet without glass of the peculiar qualities necessary for lenses, requiring unusual scientific skill and craftsmanship in manufacture, in what a predicament would our hundreds of thousands of bespectacled citizens find themselves! How could we have miscroscopes, telescopes, field glasses, gun sights, cameras and photographs, motion picture machines, periscopes, and other articles on which our national well-being and even safety depend?

Without knitting needles our looms would stop, and vast industrial districts would be crippled.

Without anesthetic drugs, and certain other medicinals universally used for treatment of prevalent diseases, sickness and death would increase, and the grip of pain, relaxed under modern science, would tighten.

Similarly, there is a multitude of other materials which many authorities believe are entitled to be classed as "key" and to be entitled to special consideration. Among these are surgical instruments, tungsten and manganese, potash, and a variety of acids and chemicals, particularly those wonderful stuffs produced from coal tar and petroleum.

A vast number of styles and sizes of surgical instruments are used by the 140,000 medical men in the United States, and without them the science would be hampered. Sharp cutting steel tools could not be made without tungsten in steel, and steel for a thousand absolutely essential purposes would be valueless without manganese for alloy. It is not exaggeration or mere whimsical conception to say that a modern farm could not be operated except for tungsten and manganese. Without potash, the production of cotton and wheat and corn would decrease. Without thorium nitrate, produced meagrely in this country before the war, we could not have gas illumination, or at least the light would be poor and flickering.

This is only a partial list of essential commodities, considered in the most cursory way. But the production of each of these articles has common attributes. The output is small in volume, and the aggregate profit is likewise meagre. Before the war, the United States depended for them on other countries, mainly Germany, which specialized in a larger number of "key" industries, and came near to supplying the world. There was profit in them when produced on such a large scale and with a measure of Governmental encouragement.

Now that peace is in sight and trade competition promises to be restored, some American interests which hastily took up the production of these essential commodities when war interrupted the normal supplies, are considering dropping them and relying again on former enemy sources, or at least on foreign sources.

The last condition prompts most forcibly the question, What are we going to do about it?

A few serious students of economic problems advocate doing nothing about it. They believe in industrial and commercial inter-reliance among nations, the same as between South Carolina and Massachusetts.

Other equally serious students urge the development of a larger degree of economic self-reliance within each nation,

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and specifically within the United States. Their arguments in the main run something like this: First, Competition between industries of each nation insures ultimately the maximum of progress; monopoly is dangerous, particularly when maintained within a single nation. Second, the waste transportation of materials from one country to another is minimized by a large degree of self-dependence. Third, in case of war or other disturbance of international trade routes, a nation may be forced suddenly to be industrially self-reliant, and "key" industries cannot grow up over night.

After pondering for months, the British Committee on Commercial and Industrial Policy, whose action is worth consideration, because Great Britain's industrial problems bear some relation to ours, declared for this policy:

"Some Governmental action should be taken to promote and safeguard the development in the United Kingdom of industries of a special or pivotal character, or those which, while essential for munitions purposes, are not of sufficient commercial importance to insure their development without such state assistance."

These industries, the Committee declared, "should be maintained at all hazards and at all expense. No ordinary economic rules apply to the situation of these minor but important industries. They must be kept alive by loans, or subsidy, by tariff, by Government contracts, or in the last event by Government manufacture."

Some of these methods of cultivation, of incubation, might be used in the United States. The Government might extend loans to help essential infant industries over the readjustment period, but it would require legislation to give this function to the War Finance Corporation, as it is now organized. The tariff is an instrument with whose use we are familiar, but even its friends admit it is clumsy and inflexible. We have no machinery for administering production bounties or subsidies in normal peace times. The Government has not the authority to impose import embargoes. Exemption from internal taxation, or special privilege in this regard, is generally considered an inexact and unscientific method of favoring certain interests. Government production in normal times is often fraught with political difficulties, and existing laws would make it hard for the Government to place large standing orders with certain manufacturers or interests to insure stability of market for some of the essential materials in future years.

Other difficulties of determining at this time a permanent and uniform line of state action for the future, grow out of the fact that industrial forces are never stable. Within a few weeks conditions may change in such a way as to eliminate one of the commodities mentioned in this discussion as pivotal, or to add others not now apparent in our search for key industries. New methods of production, new sources of supply, new lines of demand—these factors contribute to constant mutations in industrial conditions. Besides, who in this particular period of world readjustment can foresee the development of future international relations? Who knows how free will be the inter-play of industrial competition between nations? How can we say now what we should do with our important industrial infants in five years from now or how we should do it?

All these conditions—the positive as well as the uncertain—seem to point to one conclusion: That there should be some permanent government agency to study the entire problem progressively, to formulate policies and to frame schemes for promotion of key industries with due regard to general and particular phases of public interest. To a limited degree it should have executive functions. It might use some of the instruments of action already mentioned.

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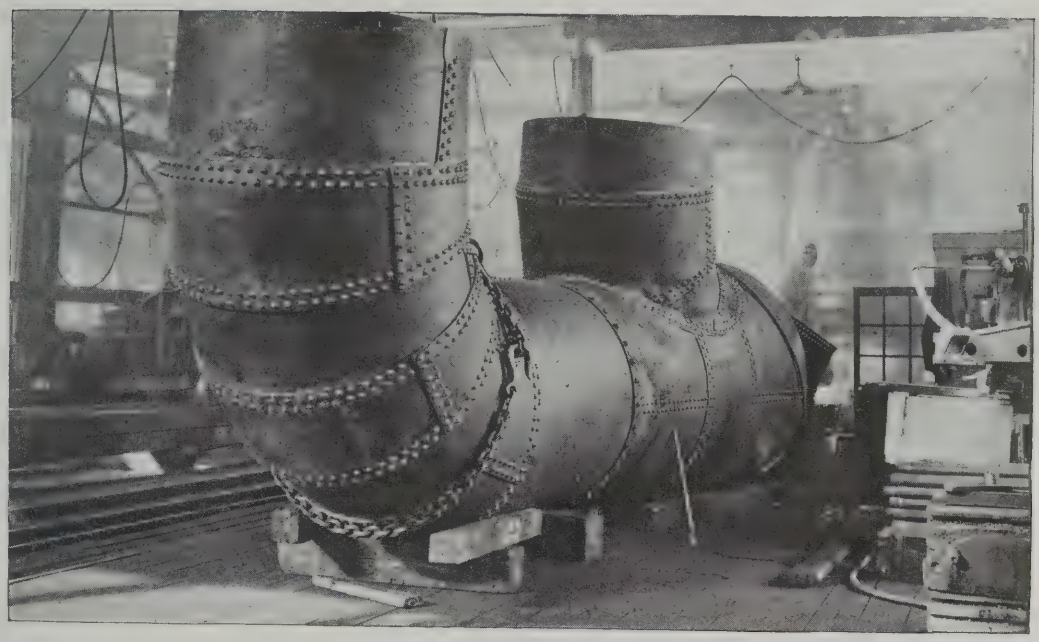
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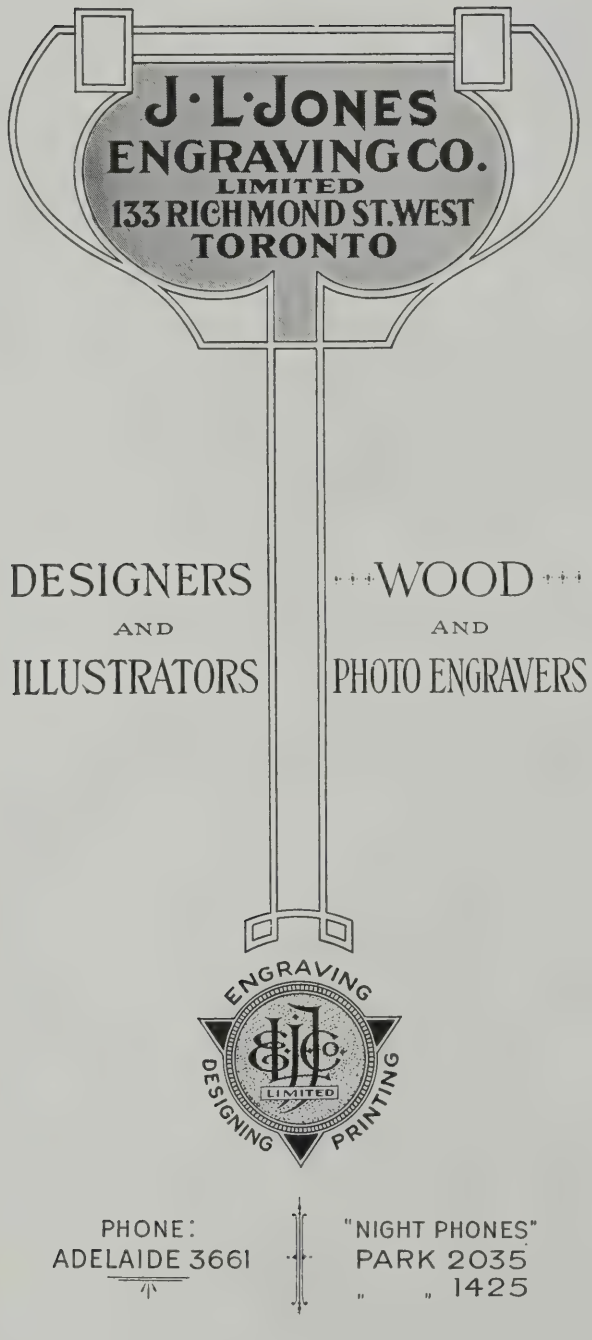
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PROTECTION INSURES PRODUCTION

The real menace of an inadequate tariff to our great corporations is not the danger of forcing them into bankruptcy, but the great loss to the general public from the reduction of their output and opportunities for employment. The work created by the demands of the home market should not be diverted to foreign countries.

By EDGAR JAY DWYER.

(From "The Protectionist.")

Every intelligent person who honestly desires to advance the genuine prosperity of the country, believes in the policy of protection and is proud of the undoubted effect of an adequate protective tariff law upon the progress of the nation and the welfare of all its people. To logical minds American protection is only another name for American production, which is the all important source of American industry and employment. The terms are synonymous, why is it so many fail to grasp this self-evident fact?

Every person who is a true friend of American industry and labor, should insist upon having the tariff question presented to the general public in the most convincing manner. Drive into the minds of the people the fact that an adequate tariff law insures home production, that home production is the chief source of their employment and the only basis of their high wages. Consequently such a tariff should be designated by its correct name, an "American productive tariff." Making this change would spike the most effective gun of the Democratic party. For a hundred years they have constantly reiterated the false statement that labor receives no benefit from "protection." They dare not state that labor gets no benefit from production; everybody knows there can be no production without employing labor.

Substituting "production" for "protection" will keep the all-important fact that American production provides work for the American people constantly in the limelight. Until some feasible substitute for wages to keep up the buying capacity of the American people is discovered, full American production will continue to demand an adequate tariff law to create and maintain full American work, wages and prosperity. Increased production is really the keystone to the arch of prosperity. A manufacturing industry benefits the country in the same ratio (more or less) as the volume of its production, the number of its employees, the stability of their work and the rate of their wages.

Work the Basis of Prosperity

It makes but little difference to the general public whether a great manufacturing company is forced into bankruptcy by a financial upheaval or whether its business is practically suspended by foreign competition. In either case it fails to provide the necessary work for the people. It is an indisputable fact that an abundant supply of work is the only basis of genuine prosperity in the United States. To keep the home fires burning, keep the spindles turning.

No Democrat will admit, and many Republicans seem to forget, that the real benefits conferred on a productive industry by an adequate tariff law are most plainly shown by the increased volume of their production, which is the only source of industrial employment. As a recent effect of an inadequate tariff, it will be recalled that in December, 1914, fifteen months after the present un-American law went into effect, the suspended employees of the United States Steel Corporation numbered over 150,000. Their jobs were cancelled, not only by direct foreign competition, but also by



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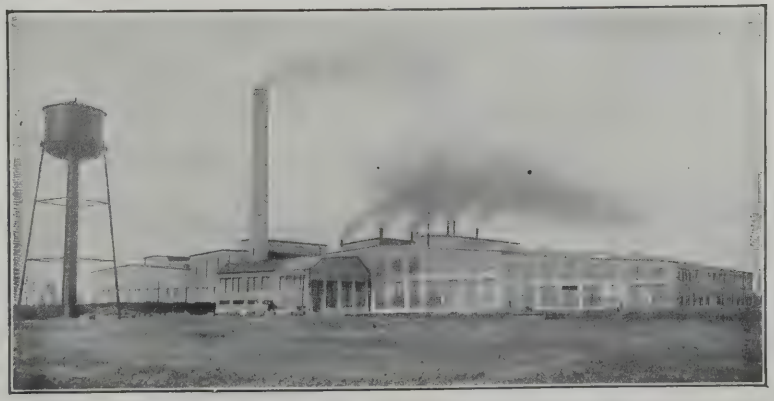
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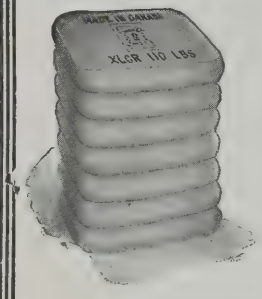
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the indirect action of the tariff, which curtailed the output of so many American industries which used steel as a raw material. Probably about one-half of these unemployed men voted for the Democratic party that destroyed their jobs. They did not know much about protection, but if it had been designated as a productive tariff and it had been kept before them, that the stability of their work depended upon the volume of steel production—their vote would have been a revelation to the industry killers.

Outgrown Protection?

A great majority of the Democratic party, and, strange to say, a minority of the Republican party think that the country has outgrown protection. They are like old Absalom Knowall, a strict orthodox deacon, who was vociferously denouncing Paine's "Age of Reason." When he was asked if he had read the book, "No," he thundered, "do you think I would read the works of an infidel?"

"There are none so blind as those who won't see." A great body of voters has a deep rooted antipathy against the word "Protection." To them it has become anathema because of political bias. To their prejudiced minds protection is the mother of trusts, the enemy of labor, and the chief source of the predatory wealth of the country. They are in the Deacon Knowall class, and will read no argument for protection. The only way to get their support for an adequate tariff law, is to eliminate the word "Protection," and substitute "Production," which explains itself.

Broad minded, loyal Republicans work honestly and conscientiously for protection, and wonder why the people cannot understand what they see so clearly.

"Oh, would some power the giftie gie us
To see oursel's as others see us."

The envenomed personal prejudice against the members of economic organizations like the Home Market Club and American Protective Tariff League, created to advance American industry, but continuously charged by the narrow minded industry killer with working solely for their own selfish interests, is what makes the word "Protection" misunderstood and unpopular.

Why were the great industrial producers of the United States not listened to when the Underwood tariff bill was drafted? Any intelligent person who requires plans for a building, goes to an architect; if in need of medical advice, he consults a physician; if he wants legal advice, he employs a lawyer. It was a travesty on the intelligence of the Sixty-third Congress, a reflection on their common sense, to enact a tariff law without consulting the only men competent to give a correct estimate of the duties that should have been levied.

Position of the Manufacturer

Why is it that in live cities and villages, the manufacturer is given the preference over any other business? Because from the very foundation of his business, all through his active career, he is a continuous employer of labor, and the wages he pays out filter through every line of business and benefit all. The Divine command: "The laborer is worthy of his hire," includes the employers of labor also. If a manufacturer benefits a community he deserves well of the community. Every manufacturer should be plain spoken and demand customs duties high enough to entitle him to make fair profits.

If more industrial leaders followed the example of Mr. George R. Meyercord, in his testimony before the Ways and Means Committee in 1909, it would advance the opportunities

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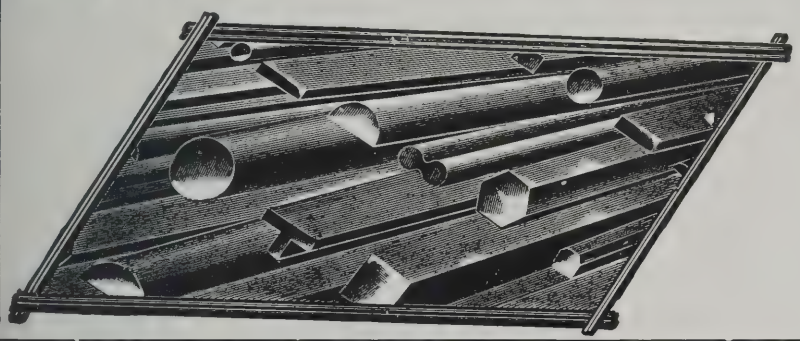
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for American production. Under the German tariff agreement then prevailing the lithographic business of the country was unprofitable, and Mr. Meyercord was trying to secure adequate tariff duties in order to overcome the German monopoly of the American trade. After finishing his direct testimony he was cross-questioned by Champ Clark, ranking Democratic member of the Committee.

Increase Duties, More Work

Speaking about the effect of the increased duties asked for, Mr. Clark said: "The result would be that your company, among others, would have more of that class of work to do?"

Mr. Meyercord: "Precisely so, that is exactly what we are here to bring about, namely, to do the lithographic work for Americans and do it with American labor, paid with American wage rates."

Mr. Clark: "In that case you would do more business and make more money?"

Mr. Meyercord: "That is our object and our purpose in asking for a material increase of the tariff on lithographic products; we want to do more business; we want to employ more labor, and we want to make more money ourselves."

Mr. Clark: "Well, it is gratifying to find one American manufacturer who is candid enough and truthful enough to tell exactly what he wants in the way of tariff duties."

The increase asked for was granted by the Payne law; it was a triumph for honest frankness as well as for American industry.

The American Protective Tariff League in their Roster of the Sixty-fifth Congress, published ninety-nine letters from Congressmen and prominent business men, all advocating protection, yet not one of them got right down to the main point that protection creates and maintains American production, the greatest employer of American wage earners.

Production spells prosperity!

To explain a political question in a convincing manner to people who will not take the trouble to solve an economic or political problem, there should be no perplexing confusion of names to mislead the voters. Make no mistakes on this point, there are a vast number of voters who confuse an American protective tariff with the American Protective Association. The similarity of the phrase is a cause of unnecessary prejudice which could be avoided by using "productive" tariff instead of "protective" tariff.

Menace of Inadequate Tariff

The real menace of an inadequate tariff to our great corporations is not the danger of forcing them into bankruptcy, but the great loss to the general public from the reduction of their output and opportunities for employment. The vast amount of work created by the demands of the great American home market must not be diverted to foreign countries by the oppressive workings of a competitive tariff.

You may catch a weasel asleep, but never for one moment will a Democratic tariff reducer admit that protection increases production. Oh, no! such an admission would be a practical acknowledgment that protection benefits labor. So they substitute ridicule for argument and talk about "the protected interests," "barricaded industries," "intrenched privileges," "shielded monopolies," "gray-bearded infant industries," etc.—anything to camouflage the plain truth that an adequate tariff law increases American production. The calumny with which they pollute our "protected industries" would in a great measure fail to contaminate our "productive" industries; because an attack on American production is an attack on American prosperity.



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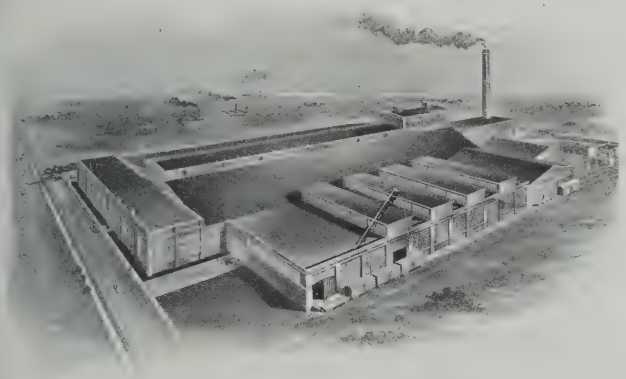
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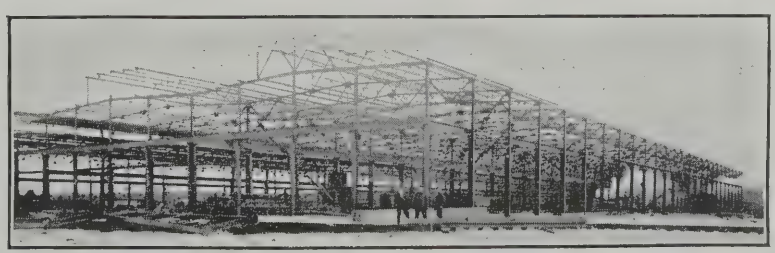
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By H. S. FIRESTONE.
(From the "Michigan Manufacturer.")

Recent events, and particularly the war, have justified me in an opinion which I stated a few years ago when I was president of the Rubber Association of America. At the annual dinner of that organization I expressed some doubt as to whether the world at large, as well as those directly interested in the rubber industry, had a true appreciation of the importance of the rubber industry, and I ventured the assertion that rubber was the most important commodity in the world by reason of its great bearing upon the happiness and social welfare of the people as well as its immense importance commercially.

At that time Colonel Samuel P. Colt, president of the United States Rubber Company, who spoke after me, said:

"While I may not have the audacity to say with Mr. Firestone that rubber is the greatest product in the world, I would in all sincerity place it among the three greatest. I would say, steel first, I would put rubber second and I would put cement third."

There has always, or at least until very recently, been a mystery surrounding rubber. This is due possibly, first, to the fact that rubber is secured from the jungles and uninhabited countries, and, second, to the supposed secret processes by which rubber is worked up and put into serviceable condition. I am very glad, however, to say that this mystery is fast being eliminated and is resolving itself into a plain manufacturing and merchandising problem and that all possible skill and energy is being exerted to refine the problems that arise in its use as a manufacturing element. I regret to say that we grow practically no rubber under the American flag, which fact necessitates our sending yearly great quantities of money into foreign countries. In 1917 we sent to foreign countries, $189,000,000 in payment for crude rubber. With this rubber and what was already in the United States there was made in the United States $600,000,000 worth of rubber products and in 1918, it is estimated, we produced $800,000,000 worth of rubber products. The capital invested in the rubber industry is estimated at $300,000,000, and there are 1,000,000 persons dependent upon the rubber industry in the United States.

Rubber Cultivation Developed

The vast quantity of crude rubber necessitated by the enormously increased consumption in the United States, particularly, has given rise to a new business—that of cultivating rubber in large plantations.

Prior to 1903, all rubber used was wild rubber taken by the natives of the countries in which the rubber trees grow and prepared in a very primitive way. Records show that in 1900 about four tons of crude rubber were produced in plantations, while approximately 4,000 acres of land had been planted with trees. In 1905 there were 75,000 acres of cultivation, which yielded a production of 195 tons. By the year 1910 over 700,000 acres of trees had been planted and in that year approximately 10,000 tons were gathered. To-day there are more than a million acres of trees in cultivation, and in the year 1917 the total consumption of both wild and plantation



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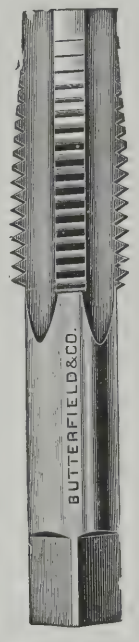
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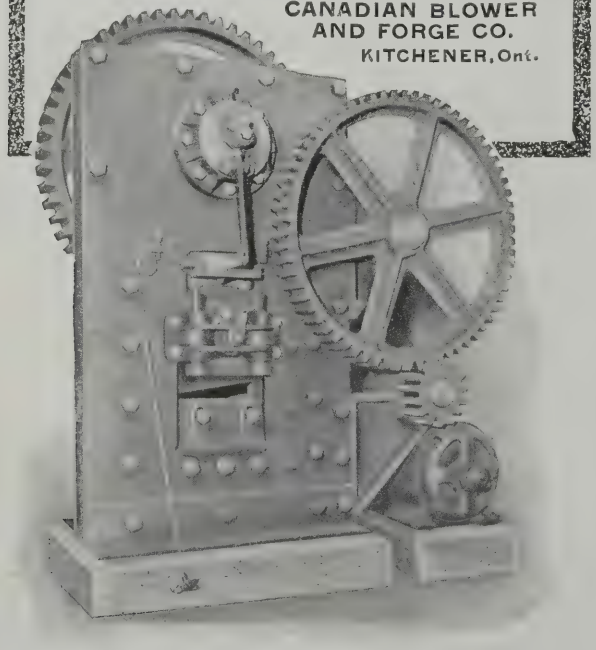
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rubber in the United States was 157,000 tons—about 70 per cent. of which was plantation rubber.

For years wild rubber supplied all the world's needs, but with the development of the automobile came with it the unprecedented demands for rubber. In spite of these demands the supply of wild rubber increased very little and in 1910, by reason of the failure to increase wild rubber production the price in this country rose to $3.50 a pound. It was only the development of the plantation which saved the situation and made possible the wonderful development of the automobile and the tire industry.

Great Supply Inaccessible

It is true that in the jungles of South America there is more rubber than the world would be able to use for many years to come, but it is also true that it is so inaccessible in the great swamps and morasses of that country that it is virtually impossible to gather it. It was estimated that wild rubber, of the grade used in tires, which is the highest grade of rubber produced, could not be gathered for less than from 55 to 65 cents per pound. It is now claimed that this same grade of rubber can be produced by cultivation under favorable conditions at not to exceed 25 cents per pound. It is, in fact, now being produced for about 30 cents per pound, but for various reasons very little of it has been purchased at this price.

I have been referring to the rubber industry as a whole, which covers a great field of rubber products. The one product in which you gentlemen are primarily interested, however, is tires. Tires are either solid or pneumatic. In the manufacture of solid tires rubber is the all important factor; in the pneumatic there is another element which is fast becoming as important as rubber, namely—fabric. The tire fabric is made entirely from cotton. There are only certain kinds of cotton, which by reason of their peculiar characterizations, can be used in the building of tire fabric. There is the Egyptian, the Sea Island, the American-Egyptian and the American Peeler. During the period of the war a number of circumstances have caused cotton to increase in value to such an extent that fabric has come to have a most important bearing on the price as well as the quality of the tire. You have all heard, no doubt, of the cotton boll weevil, but very few of you, perhaps, have connected it in any way directly with your own business. Last year the cotton boll weevil made its appearance in the Sea Island cotton belt. This year it did so much damage as to reduce production materially.

U. S. Helps Improve Cotton Fibre

The United States Department of Agriculture has met this situation by placing experts in this belt to make an extensive study of the history of the boll weevil and to devise means for its eradication. These experts believe that they have discovered a method of control and that a fair supply of cotton may be expected from this source next year.

For many years Egypt has been an important source of supply for cotton used by tire manufacturers. The war not only reduced the acreage of this cotton, but brought about a laxity of supervision of cotton raising which affected the quality of the product. To meet this situation there has been created at Alexandria, Egypt, an organization which will hereafter sort and classify all cotton for export. This means that tire manufacturers will be able to get the particular grade of cotton they need with greater precision than heretofore.

There is an increasing acreage of cotton in some parts of the United States not heretofore given to the raising of that commodity.

The United States Department of Agriculture is giving these localities considerable attention with a view to the pro-



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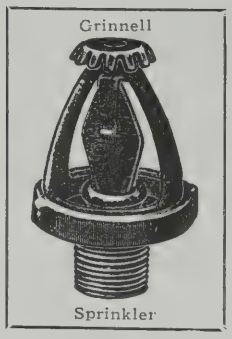
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duction of high grade cotton. Experiments of this nature are being made in Arizona and Yazoo Valley and some success is attending the efforts with a prospect of placing this on a commercial scale.

War Curtailment

The manufacture of tires for ten years has steadily increased by leaps and bounds until last year. In 1918, as a result of the great economic question with which the nation in war was confronted, our Government took steps looking to a decrease in production and a marked curtailment of the manufacturing programme. In the first place, the War Trade Board, in order to release shipping space, limited the importation into this country of crude rubber to 100,000 tons for the calendar year 1918. The War Industries Board, in order to conserve labor and various commodities essential in the prosecution of the war, on July 31, 1918, placed upon manufacturers of tires a restriction for the last six months of the year which limited the production of pneumatics to 50 per cent. of the number produced in the corresponding period of 1917. Further curtailment would unquestionably have been made had not the war been won when it was. With the removal of these restrictions, however, tire manufacturers will now readjust themselves with a view to return to their normal programmes of manufacture.

Speaking of this brings me to Germany's need of rubber. When the war began Germany had about 70,000 motor vehicles requiring tires. The English blockade prevented the importation of crude rubber into that country and thus confined Germany's consumption of rubber to its stock on hand. This proved to be a sufficient supply for the first year of the war only, and in 1916 the price of crude rubber advanced to $10 a pound. Rubber goods, and more particularly tires, were used only absolutely essential and substitutes were eagerly sought. Their efforts were attended with very little success and none of their substitutes have proved of any value commercially.

The war has effected some important changes in the production and transportation of crude rubber. The Rubber Growers' Association has introduced standard practices in gathering and coagulating the rubber latex in such a way as to enable rubber manufacturers to get a better and more uniform product.

In the early days, by reason of the fact that practically all rubber plantations were located in the English colonies, the custom became established of shipping crude rubber from the estates in the far east to London. American manufacturers, therefore, had to depend on the London market for the bulk of their rubber supply. When the war broke out it became difficult to ship rubber from the plantations to London and American manufacturers, who consume about 70 per cent. of the world's production, began to buy rubber direct from the far east and ship it via the Pacific. In view of the fact that the United States is the largest buyer of crude rubber in the world, it is very probable that the present methods of buying in the far east will continue. This will mean a saving of about five cents per pound in the purchase price of the rubber. The difficulty in getting ocean transportation has developed new economies in shipping crude rubber. It was formerly the custom to pack the rubber in boxes, but by the method now in use the rubber is compressed into compact bales which eliminates the necessity of boxes and means a saving of several million dollars a year in shipping cost.

Standardization of Sizes Helps

In the field of tires the most noteworthy change which the war has brought about has been the standardization of sizes. This means the elimination of a great number of sizes and the centring of production upon those sizes which reasonably provide for almost every kind of motor vehicle. This is



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going to mean less investment to the manufacturer in equipment and stock, less investment to the dealer in stocks and a quicker turnover for his investment, and ultimately less cost per mile to the consumer in transportation.

Now that the war is over, the rubber industry of the United States, so largely dependent upon foreign raw materials for its essentials, and being called upon for a world supply of rubber products, is intensely interested in the outcome of the peace conference. The Rubber Association of America has prepared a brief, outlining the importance to the industry of the proper diplomatic arrangements with foreign markets arising out of the settlement of the world's affairs. Should there be export duties or embargoes placed on the shipments of crude rubber in the United States, the obvious effect would be to raise the price of all rubber products and particularly tires in proportion with the restriction imposed. Increased price must necessarily affect our export business as well as our domestic business. Curtailment of volume in itself must needs give rise to further increases in price. We trust, however, that the matter will be so handled that the industry may proceed without hindrance and without impairment to supply the wants of mankind both at home and abroad.

Auto Industry Uses 70 Per Cent.

The effect upon the automobile industry of any radical changes in the tire manufacturing business can be readily seen from the fact that during 1917 the automobile industry consumed approximately seventy per cent. of the crude rubber imported into this country and that the value of tires sold amounted to $420,000,000. In 1917 there were in operation in the United States nearly 5,000,000 cars and it is estimated that by January 1, 1919, there will be operated more than 5,600,000, an increase of twelve per cent. During the present year the tire manufacturers have had to add considerable floor space in order to take care of Government business. This space can now be devoted to the requirements of the automobile industry and preparation is now being made to supply the country's requirements upon a larger basis than ever before. With this outlook for the future, and the benefit of our experience in the past, I feel sure that the tire manufacturers who are giving great thought and effort to the working out of the problems which must be solved, will be able to work out their difficulties in such a way that they will be able to give to your business a better service than ever before.

The Peck Carrier

With its usual emphasis on the illustrative side of catalogue production, the Link-Belt Company has devoted many pages of its latest publication, "The Peck Carrier," to a series of excellent views of installations of this labor-saving device for the handling of coal, coke, ashes, cement, sand, ore, stone and other materials. In addition, complete specifications are given of the various standards, while the catalogue is prefaced by useful illustrated descriptive matter. It is a publication of 96 pages, arranged in compact form, which should be in the hands of all manufacturers having carrying problems to solve.

Frank H. Simonds, United States war correspondent now in Europe, thus defines Bolshevism:—

"Bolshevism is, as much as it is anything, an attack upon the theory and system of private property. It is surely and simply communism. It is class warfare directed against all our political and economical theories in the western world. It seeks to govern the world by masses of the least skilled labor. It is killing all men of capacity and ability in Russia. It wars upon nationalism, upon patriotism, upon all that we have been accustomed to regard as organized civilization. Its only liking for the League of Nations is based upon the conviction that the League of Nations will disarm exactly those forces which might otherwise resist Bolshevism, and so far this is an accurate conclusion."

There is Some Magic in the Phrase: "Government Control," but—

The mere merging for administrative purposes of the lines of the Intercolonial, National Transcontinental, and Canadian Northern Railways into Canadian National Railways, serving though they do the nine provinces of Canada, the great producing areas, the chief ports, and most of the industrial, commercial and financial centres, is not in itself sufficient guarantee for their successful operation.

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Catalogues and Booklets

Truscon Building Products

The Trussed Concrete Steel Co. of Canada, Limited, have just issued an eighth edition of their convenient little pocket-size catalogue of Truscon Building Products. It constitutes a handy little encyclopedia, 80 pages in extent, of the various building products made by this company. Everything that the company manufactures is listed and described, frequently with the addition of halftone or line illustrations, and there is a convenient index at the back to facilitate the search for particular items. The booklet is really intended merely as an outline of the various Truscon products. Complete catalogues devoted to any individual product, and containing full information, are procurable and will be sent on request.

A Yale Products Catalogue

There has just been issued "Catalog No. 1" of the Canadian Yale & Towne, Limited, St. Catharines, Ont., containing an illustrated description of the complete line of Yale products manufactured in the company's Canadian plant. The catalogue, which is very strongly put together, contains 174 pages and is very handsomely printed and clearly illustrated. It is scarcely necessary to refer to the quality of the Yale line of locks and hardware. The name "Yale" has become a household word. The fact, however, that the line is being constantly augmented and diversified makes it desirable that those requiring these goods should have the new catalogue on hand in order to be posted on the latest developments.

Western Canada Mining Directory

The Progress Publishing Co., Ltd., of Vancouver, have just issued the 1919 edition of their "ABC" Western Canada Mining Directory and Year Book, being one of their series of "ABC" Trade Directories. As its name implies this book, within the scope of about 120 pages, comprises a complete directory of metalliferous and coal mines in British Columbia, Alberta, Saskatchewan and Manitoba and the Yukon, and the directory section gives not only the names of the mines but the names of owners, location, state of development, product, capital, and similar information. The book also contains a section giving full details of the personnel of mining departments of the Provincial and Dominion Governments and lists of officials, with associations and organizations connected with the mining industry. Another section of the book gives in condensed form the mining laws of the western provinces and those of the Dominion affecting Western Canada.

The book should prove a valuable addition to the reference shelves not only of people directly interested in mining but of the business community in general.

A Fine Plant Illustrated

The Dominion Forge & Stamping Co., Ltd., Walkerville, Ont., have issued an attractive catalogue, showing exterior and interior views of their forge plant, their sheet metal plant and their automobile frame plant. The company are equipped to make all kinds of forgings, stampings and heavy drawn steel parts to specification; and from this catalogue a manufacturer can obtain an idea of the excellent facilities the company have for turning out this class of product, particularly in large quantities.

For instance, illustrations are shown of the steam hammer shop with its twenty steam hammers, ranging in capacity from 6,000 pounds to 600 pounds, of the board hammer shop with its fifteen board hammers, ranging in capacity from 800 pounds to 2,000 pounds; and of the forging machine department, with its five upsetting machines. Also there are shown illustrations of the stamping plants with their three hundred presses, capable of forming steel sheets cold up to ⅜ of an inch in thickness. Illustrations of special note are the two die sinking and tool making departments, where all the forging and stamping dies and tools are made. There are also four pages of illustrations of typical forgings, stampings and heavy steel drawn parts made for various customers.

Any manufacturer using forging or steel stampings of any kind should be much interested in this catalogue, copy of which will be sent on request.

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The fact is, however, the people who live on this street have forgotten all about dust and mud, for the roadway is smooth and clean, dustless and mudless every day in the year. Their thanks are due to the fact that the enlightened city authorities use Tarvia in the road to bind it together and make it automobile-proof. The powerful wheels that used to rip up the surface now merely smooth it down, for the surface instead of being brittle is now slightly plastic and very tenacious.

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INDUSTRIAL CANADA

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The CANADIAN MANUFACTURERS ASSOCIATION.

INCORPORATED.

Vol. XX. TORONTO, JUNE, 1919 No. 2

Editorial Comment

Shipping

IT will be very serious if the coming autumn finds the Canadian farmer and the Canadian manufacturer unable to ship their products to the waiting markets of Europe through lack of ocean space. The Government is making, we believe, great efforts to provide the necessary tonnage. This is a difficult problem in view of the world's shortage of ships, but we hope that no efforts will be spared to secure at least a great part of the shipping which will be required.

Export Trade

AS the gross public debt of Canada has been multiplied by five during the war, it is evident that the burden of taxation will be greatly increased. Canadians up to the present have not known the meaning of the word "taxation." Prior to the war we had no army and no navy; our fertile soil produced plenty of food, and real privation was unknown. We have now to pay the bills of the war. To do this we will have to work hard and save money. It is especially important that we increase our export trade, in order to restore the adverse trade balance and unfavorable exchange to more normal conditions.

Labor Legislation

THE Peace Treaty will contain certain clauses which aim at the establishment of international standards governing labor conditions. This will remove one of the greatest obstacles that have barred the way to improvement of industrial conditions. If one country, for example, determined to enact legislation which would greatly improve the conditions, that country would be immediately placed at a disadvantage with competing countries which could produce more cheaply through the existence of their low standards of living. When demands are considered for legislation concerning labor in Canada, it must be remembered that this is a young country commercially and industrially. As a general rule we cannot establish and maintain labor conditions until these conditions have been established in Great Britain, France and the United States, the three leading nations of the world. We should follow, but we cannot lead.

Industrial Research

THE action of the Government in deciding to provide for industrial research and technical education is most encouraging for Canadian industry. We have been greatly handicapped by our lack of facilities for the investigation and study of these subjects, and we are far behind other countries in this respect. An entire industry may be created or destroyed by the discovery of some very simple constituent of a manufacturing process. Is it not then important that we should have special laboratories constantly at work discovering and analyzing processes which may have such a tremendous effect upon the industrial life of the country?

Preferential Tariffs

NOW that the British Government has officially adopted the principle of preferential tariffs within the Empire, it is well to remember that Canada was the first of all the British countries to extend preferential tariff treatment to the United Kingdom, and to-day the preferences which Canada gives to other British countries are on the whole very much greater than the preferences which she receives from them. We hope to see a system of preferential tariffs established and maintained throughout the Empire, and that such preferences will equal those now extended by Canda.

The Royal Commission on Industrial Relations

THE Royal Commission on Industrial Relations has almost finished its sessions. During its progress through Canada, the Commission has heard an extraordinary number of theories dealing with the constitution of society, politics, industry, and even religion. It is interesting to note how some old theories which have been knocking about Europe for the last 200 years have again come to life. Communism, collectivism, socialism, and syndicalism were all there, though sometimes in new

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clothes. Although the criticism was chiefly destructive, there is no doubt that the work of the Commission on the whole should be of considerable value. Publicity will kill most of the impracticable theories through ridicule. What is good may be used for constructive purposes.

Industrial Re-organization

THE present industrial system is being subjected at present to fierce criticism, but it is noticed that there are few practical suggestions advanced to substitute for it a better system.

We understand that the international labor unions have great reserves. The various bodies which have been publishing advanced views on industrial re-organization are not without funds. Let them take some of these funds and build a model factory and operate it according to their ideas. When we see their theory practically demonstrated in this matter we shall be better able to decide whether or not our present methods need radical change.

Policemen and Firemen

POLICEMEN and firemen are more nearly related in their duties to soldiers and sailors than they are to trade unions. If the army and navy strike on account of alleged grievances, such action is called mutiny and punished accordingly. When policemen and firemen strike, all the lives and property of the entire community which they serve are deprived of that protection to which they are entitled. It is almost impossible to imagine the Royal Northwest Mounted Police striking, and it is difficult indeed to justify the desertion of duty by other policemen. When policemen, admitting that they have no personal grievances, desert their posts and break their agreements to join a sympathetic strike, their usefulness as public servants is destroyed.

Canadian vs. United States Tariff

IN comparison with the United States, Canada has been a low tariff country. When the Republicans were in power, the United States tariff as a general rule, was nearly double the Canadian tariff. When the Democrats, who advocated tariff for revenue only, were in power, there was a general reduction. It is interesting to note, however, that, exclusive of the special war tariff which was levied on all imports both dutiable and free, the Canadian tariff during the fiscal years of 1916, 1917 and 1918 was still considerably lower than the American tariff.

The total value of dutiable goods imported into the United States during that country's fiscal year, 1916, amounted to $705,236,160. The total amount of customs duties collected on these importations of dutiable goods was $211,866,222. Thus the average rate that year on dutiable goods was 30 per cent.

The value of dutiable goods imported into the United States for that country's fiscal year 1917, was $810,514,665. The duties collected on these dutiable imports amounted to $225,981,934. Thus the average rate on dutiable goods that year was 27.8 per cent.

The total value of dutiable imports under the United States tariff for the fiscal year 1918, was $827,460,031. The duties collected on these dutiable imports amounted to $179,998,383. Thus the average rate for 1918 was 21.7 per cent. on dutiable imports.

In Canada during the fiscal year ending March 31st, 1916, the total dutiable imports amounted to $289,366,527. Duties were paid on these dutiable imports amounting to $103,940,100. Of this amount the special war tax represented $25,256,787. Thus the average rate on dutiable goods, exclusive of the customs war tariff, was 27 per cent.

In 1917, Canada's dutiable imports amounted in value to $461,733,609. On these dutiable imports customs duties were paid amounting to $147,631,454. On this amount the customs war tax was $37,830,427. Thus the average ad valorem rate of duty on dutiable goods, exclusive of the war tariff, was 23.7 per cent.

In the year ending March 31st, 1918, Canada's total value of dutiable imports amounted to $542,341,522. On this amount customs duties were paid amounting to $161,595,628. Of this the customs war tariff represented $45,081,562. Thus the average ad valorem rate on dutiable goods, exclusive of the war tariff, was 21.4 per cent.

Bolsheviki Control of Factories

BY the aid of a mercenary army the Bolsheviki rulers of Russia attempted to put their theories in regard to the management of industry into practice. The result of their efforts is indicated in the British Government's White Paper entitled "Bolshevism in Russia," which was published in April of this year. This document is a compilation of reports and letters from various agents and British citizens in Russia. The following is a report from a manager of a factory near Moscow, who escaped from Russia:

"For the past year workers have been in control of all mills, and as an example of methods adopted, I state below the conditions appertaining at the mill where I was general manager, a mill employing 6,500 workers, two-thirds of whom were women, and one-third men. In the first instance a committee was elected from the workers by the workers. The committee consisted of 24 men, and from these the following three sub-committees were formed:—

(1) Controlling Committee, consisting of six.
(2) Food Committee, consisting of four.
(3) The Enlightening Committee, consisting of four.

The remaining ten formed the Presidium or Council.

The Presidium sat every day in a house in the mill-yard from 9 a.m. till 3 p.m., and the President of the Workers'

Association, Toronto, June 10th, 11th, 12th

Committee always presided at the sittings of the Presidium. The duties of the Presidium were to receive all complaints from the workers, and adjust them to the workers' benefit, whether the complaint was of a reasonable nature or otherwise. The result was a continual unnecessady and annoying interference with the inside management of the mill. For instance, should the spinners complain, say, that No. 14 yarn is working badly, they would call for the man superintending the material department, and tell him to put in higher material, without taking into consideration the loss incidental to such procedure. It was therefore a constant battle to prevent the Presidium from doing this manner of injurious actions. The duties of the Controlling Committee are to control all buying and selling in connection with the mill. No money can be paid for goods delivered, or for work done, without their signature. Nothing can be bought without their consent, and all articles bought in the district must be bought by the members of the committee themselves. Owing to this, these men, having no idea of the quality of an article, very often buy inferior goods at higher prices than would be given by an expert. They control every action of, and are constantly interfering with, the administrative staff, and so confuse and bother the men employed on this work until they are unable to perform their duties, and lose all interest and initiative.

The Food Committee look after the obtaining and distribution of foodstuffs, and are constantly travelling all over the country seeking food, but are very unsuccessful in this purpose, and therefore have very little to distribute.

The duties of the Enlightening Committee are rather obscure, but appear to consist first of the propagation of Socialistic principles, and they do this by buying literature of a Socialistic nature, of course, for the Workers' Club, and second in providing amusements for the workers by organizing concerts, dances, etc. The great desire of the members of all these committees seems to be to get commandeered either by the general meeting or by their own committee, upon the grounds of urgency to go to some other town or district for some reason or other, and when they are on these expeditions they receive fifty roubles per day for their expenses, besides their daily wage, which is paid out of the mill funds, and very often they have the possibility of receiving a good round sum by way of bribes when buying something for the mill. All these committees, though elected in the first instance by the majority of the workers, are now practically self-elected, as the majority of the workers are so inert, uninterested, and tired of the whole Bolshevik system that they do not trouble to attend for the purpose of voting. The elections generally take place at meetings with not more than 300 or less workers present out of the 6,500, and the members of the committee have generally prearranged who will be chosen, and have their supporters who arrange matters as required.

All these committees very soon lose the trust of, and are not in favor with those who have elected them, but are generally re-elected as stated before, and again the same things go on."

Do we want this system in Canada?

A Sympathetic Strike

THE general strike is failing to achieve its object. If the principle of the general strike is admitted, the transaction of business becomes impossible. One out of a hundred unions, for example, determines to strike; the other 99 are ordered by a central body to stop work, break their agreements with their employers, and to mass their entire strength behind the striking union. It is apparent that this method would place in the hands of a few extremists a mighty engine which could be directed against employers in such a way as to paralyze business, by a continual succession of strikes.

"Sympathetic strikes must always fail," says Hon. Gideon D. Robertson, Dominion Minister of Labor, who has done such splendid work in assisting to restore order at Winnipeg.

The following statement by Mr. Robertson in regard to the situation is well worth reading, and shows the attitude of the leading labor men in Canada towards the general strike:

"The promoters of the general strike in Winnipeg now sit in the ashes of their folly. Something like 30,000 men and women were called out, professedly for the purpose of enforcing the recognition of the right of collective bargaining. In responding to the call the majority violated and repudiated their obligations to their own trade unions and their contracts with their employers. Individually and collectively they wilfully discarded their agreements, indicating that the possession of what they are contending for is of little value.

"Labor organizations which require that contracts made be fulfilled merit and command the respect of employers, of the public and of Governments. Labor leaders who advocate that only might is right, who hold that law, justice and honor should be discarded at will, merit and receive the condemnation of all good citizens.

"If an employer or a number of employers in a given industry deny to their workmen the right to bargain collectively for the sale of their services, the economic force of the workmen may properly be directed against the offender, and the public will approve and sympathize. In a general sympathetic strike the force is directed against the whole community, who are innocent of any responsibility for the offence. Public indignation is immediately aroused because of the inconvenience, loss and suffering imposed upon innocent people. Therefore, sympathetic strikes must always fail.

"Socialism has long recognized that the trades unions are an impassable bar to its revolutionary programme, and seeks through the One Big Union movement to undermine and destroy the Labor organizations, whose policy is to regard thier obligations as sacred and inviolate. It has chosen the One Big Union idea as a popular primrose path along which to lead the trade unionist, urging him to discard his honorable obligations and join the big show.

"In March last at Calgary the play was written. The Winnipeg strike is its first rehearsal, with the main performance promised for a later date. The Winnipeg rehearsal has cost approximately two million dollars in wages lost in Western Canada, and has proven the play to have been badly written, and unpopular with both the public and most of the performers.

"Employers must not mistake the outcome of the general sympathetic strike as a defeat to organized Labor. On the contrary, Labor will emerge from the conflict strengthened with the wisdom gained from its experience. Numerous strong Labor organizations have, by their voice and actions, largely contributed to the outcome because they believe the general sympathetic strike is wrong, vicious and demoralizing. Employers should rather seek to deal justly, and at this period liberally, with their workmen, and assist the bona fide Labor unions in their legitimate efforts to obtain a reasonable competence for all who are willing to labor."

N.F.P.A. CONVENTION

HELD AT OTTAWA, PASSED IMPORTANT RESOLUTIONS IN REGARD TO FIRE PREVENTION

At the joint invitation of the Dominion Fire Prevention Committee, the Dominion Department of Insurance and the Commission of Conservation, the annual convention of the National Fire Protection Association was held at Ottawa on May 5th, 6th, 7th and 8th. Nearly 300 delegates from the United States and a large number from all parts of Canada attended the meetings. The sessions were replete with discussions and reports of a most interesting nature, in which the means of safeguarding life and property from destruction by fire were presented. Much stress was laid upon the necessity of convincing the public of the value of fire prevention, and several of the speakers emphasized the fact that the majority of fires resulted from negligence and could only be eliminated by enforcing a greater measure of carefulness upon those immediately responsible for the safe maintenance of property. The committee on resolutions presented the following, which were unanimously adopted:

1. The adoption by municipalities of a Standard Building Code to the end that fire-resistive building construction may be encouraged, the use of inflammable roof coverings prohibited, adequate exit facilities from buildings assured, and interiors so designed and fire-stopped as to make easy the extinguishment of fires therein.

2. The adoption by all provinces of minimum building requirements for the protection of Provincial and county hospitals, schools, asylums and similar institutions outside city limits and of small communities in which the establishment and enforcement of a building code is impracticable.

3. The enactment by each province of a fire marshal law to the end that official investigation may be made of the causes of all fires, preventable fires may be eliminated by public education, and the crime of arson stamped out.

4. The adoption of ordinances providing for the systematic inspection of all buildings by city fire marshals or local firemen to insure the vigorous enforcement of rules for cleanliness, good housekeeping and the maintenance of safe and unobstructed exits, fire-fighting apparatus and other protective devices.

5. The enactment of ordinances fixing the cost of extinguishing preventable fires upon citizens disregarding fire prevention orders, and a more general legal recognition of the common law principle of personal liability for damage resulting from fire due to carelessness or neglect.

6. The wider general use of the automatic sprinkler as a fire extinguishing agent and life saver and the more general adoption of the fire division wall as an important life-saving exit facility.

7. The universal adoption and use of the safety match and legislation prohibiting smoking in all parts of factories, industrial and mercantile buildings, except in such fireproof rooms as may be specially approved for the purpose by fire departments.

8. The education of children and the public generally in careful habits regarding the use of fire.

9. The universal adoption and exclusive use of slow-burning motion picture film, with national, provincial, and local legislation to prevent the continued manufacture and distribution of material having the hazardous properties of the guncotton stock now commonly employed.

10. The co-ordination of all these activities through a central administrative officer or body of the province or city having primary jurisdiction for the purpose of promoting uniformity of action and efficient co-operation.

It was felt by the delegates in general that the Ottawa convention accomplished much in stimulating and encouraging the fire prevention movement in both Canada and the United States. This feeling was thus summarized by *Fire Protection,* the official organ of the Fire Marshals' Association of North America:

"The National Fire Protection Association went to Canada with its convention this year, thinking that the holding of the meeting in Ottawa might be of special service to the Canadian members of the organization. It seemed to the Americans, however, that the Canadians had made most wonderful progress before the holding of the convention, and while the Canadians said that the convention was a source of assistance and inspiration to them, the Americans went away feeling that they had taken away more assistance and inspiration than they gave."

TARIFF CHANGES

NEW BUDGET

The tariff resolution proposed by the Minister of Finance in his Budget Speech on Thursday, the 5th instant, substitute other revenue provisions in lieu of former tariff items 24, 25, 25a, 26, 27, 28, 28a, 29, 60, 61, 83, 84, 210, 267a, 290, 329a, 337, 343, 345, 348, 350, 351, 356, 384, 446, 447, 448, 591. The new rates of duty provided in the resolutions are as follows:--

TARIFF ITEMS.		British Preferential Tariff.	Intermediate Tariff.	General Tariff.
24 Chicory, raw or green	per pound	2¼ cents	3 cents	3 cents
25 Chicory, kiln-dried, roasted or ground	per pound	3 cents	5 cents	5 cents
25a Coffee, extract of, n.o.p., and substitutes thereof	per pound	5 cents	7 cents	7 cents
26 Coffee, roasted or ground, and all imitations thereof, and substitutes therefor, including acorn nuts, n.o.p	per pound	3 cents	5 cents	5 cents
27 Coffee, roasted or ground, when not imported direct from the country of growth and production	per pound	3 cents	5 cents	5 cents
28 Coffee, green, imported direct from the country of growth and production, and green coffee purchased in bond in the United Kingdom	per pound	and 7½ p.c. 2¼ cents	and 10 p.c. 3 cents	and 10 p.c. 3 cents
28a Tea, imported direct from the country of growth and production, and tea purchased in bond in the United Kingdom	per pound	7 cents	10 cents	10 cents
When in wrappings, cartons or other packages weighing five pounds or less, the weight of the wrappings, cartons or other packages to be included in the weight for duty				
29 Coffee, green, n.o.p	per pound	2¼ cents and 7½ p.c.	3 cents and 10 p.c.	3 cents and 10 p.c.
60 Wheat, n.o.p		Free	Free	Free
60a Wheat, when imported from a country which imposes a Customs duty on wheat grown in Canada	per bushel	8 cents	12 cents	12 cents
61 Wheat flour, n.o.p; semolina, n.o.p		Free	Free	Free
61a Wheat flour and semolina, when imported from a country which imposes a Customs				

TARIFF ITEMS.		British Preferential Tariff.	Intermediate Tariff.	General Tariff.
duty on wheat flour or semolina manufactured in Canada	per barrel	30 cents	50 cents	50 cents
83 Potatoes, n.o.p., and potatoes dried, desiccated or otherwise prepared, n.o.p		Free	Free	Free
83a Potatoes, when imported from a country which imposes a Customs duty on potatoes grown in Canada	per bushel	12½ cents	20 cents	20 cents
84 Potatoes, dried, desiccated or otherwise prepared, when imported from a country which imposes a Customs duty on such articles produced in Canada		15 p.c.	30 p.c.	30 p.c.
210 Peroxide of soda; soda, sulphate of, crude, known as salt cake; silicate of soda in crystals or in solution; bichromate of soda; nitrate of soda or cubic nitre; sal soda; sulphide of sodium; nitrite of soda; arseniate, binarseniate, chlorate, bisulphite and stannate of soda; prussiate of soda and sulphite of soda		Free	Free	Free
210b Barilla or soda ash	per pound	⅕ cent	3/10 cent	3/10 cent
267a Crude petroleum in its natural state, .7900 specific gravity or heavier at 60 degrees temperature, when imported by oil refiners to be refined in their own factories		Free	Free	Free
290 Cement, Portland, and hydraulic or water lime, in barrels, bags, or casks, the weight of the package to be included in the weight for duty	per 100 pds.	5 cents	8 cents	8 cents
329a Iron ore		Free	Free	Free
337 Lead, old, scrap, pig and block	per pound	¾ cent	1 cent	1 cent
343 Tin, in block, pigs or bars; tin strip waste, and tin foil		Free	Free	Free
345 Zinc dust, sheets and plates; sal ammoniac skimmings; and seamless drawn tubing of zinc		Free	Free	Free
345a Zinc spelter and zinc in blocks, pigs, bars or rods	per pound	¾ cent	1 cent	1 cent
348 Copper in blocks, ingots or pigs	per pound	1 cent	1½ cents	1½ cents
348b Brass and copper scrap		Free	Free	Free
348c Brass in blocks, ingots or pigs; copper in bars or rods, not less than six feet in length, unmanufactured, n.o.p.; copper in strips, sheets or plates, not polished, planished or coated; brass or copper tubing, in lengths not less than six feet, and not polished, bent or otherwise manufactured		5 p.c.	10 p.c.	10 p.c.
348d Copper in bars or rods when imported by manufacturers of trolley, telegraph and				

TARIFF ITEMS.		British Preferential Tariff.	Intermediate Tariff.	General Tariff.
	telephone wires, electric wires and electric cables, for use only in the manufacture of such articles in their own factories	Free	Free	Free
356	Nickel in bars and rods, strips, sheets or plates	Free	Free	Free
356a	Nickel silver and German silver in bars, rods, strips, sheets, plates and anodes	5 p.c.	10 p.c.	10 p.c.
384	Rolled iron or steel sheets and strips, polished or not, number fourteen gauge and thinner, n.o.p.; Canada plates; Russia iron, terns plates and rolled sheets of iron or steel, coated with zinc, spelter or other metal of all widths or thicknesses, n.o.p.; and rolled iron or steel hoop, band, scroll or strip, number fourteen gauge and thinner, galvanized or coated with other metal, or not, n.o.p.	7½ p.c.	12½ p.c.	12½ p.c.
384a	Rolled iron or steel hoop, band, scroll or strip, number fourteen gauge and thinner, and rolled iron or steel sheet, when imported by manufacturers for use only in their own factories in the manufacture of galvanized iron or steel hoop, band, scroll, strip, or sheet.	Free	Free	Free
446	Cultivators, harrows, horse-rakes, seed-drills, manure spreaders and weeders and complete parts thereof	10 p.c.	15 p.c.	15 p.c.
446b	Ploughs and complete parts thereof	12½ p.c.	17½ p.c.	17½ p.c.
446c	Windmills and complete parts thereof, not including shafting	12½ p.c.	17½ p.c.	17½ p.c.
447	Portable engines with boilers, in combination, horse-powers and traction engines for farm purposes; windstackers, and threshing machine separators, including baggers, weighers and self-feeders therefor, and complete parts of all articles specified in this tariff item	12½ p.c.	17½ p.c.	17½ p.c.
448	Hay loaders, potato diggers, fodder or feed cutters, grain crushers, fanning mills, hay tedders, farm, road or field rollers, post hole diggers, snaiths, and other agricultural implements, n.o.p.	12½ p.c.	20 p.c.	20 p.c.
591	Farm wagons and complete parts thereof	15 p.c	20 p.c.	20 p.c.
591a	Freight wagons, drays and sleighs, and complete parts thereof	17½ p.c.	25 p.c.	25 p.c.
705a	Settlers' effects, viz.: Machines, vehicles and implements for agricultural purposes, moved by mechanical power, if actually owned abroad by the settler for at least six months before his removal to Canada, and			

TARIFF ITEMS.		British Preferential Tariff.	Intermediate Tariff.	General Tariff.
subject to regulations prescribed by the Minister of Customs ..... Provided that the said machines, vehicles and implements may not be so entered unless brought by the settler on his first arrival, and shall not be sold or otherwise disposed of without payment of duty until after twelve months' actual use in Canada.		Free	Free	Free

Under the resolutions the five per cent. British preferential war tariff is wholly cancelled. The resolutions also make the following goods exempt from the 7½ p.c. war tariff, viz.:

(1) Materials imported to be used in the manufacture of goods enumerated in tariff items 446, 446b, 446c, 447, 448, 449, 450 and 591;

(2) Olive oil and peanut oil for canning fish;

(3) Materials imported prior to the first day of September, 1920, to be used in the manufacture of oleomargarine as described in The Dairy Industry Act,1914, and amendments thereto;

(4) Linen or cotton clothing, n.o.p.;

(5) Goods enumerated in the following tariff items in Schedule A:
5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 24, 25, 25a, 26, 27, 28, 28a, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 39a, 41, 42, 43, 44, 46, 46a, 47, 48, 49, 50, 51, 52, 53, 56, 57, 58, 59, 60, 60a, 61, 61a, 62, 63, 63a, 64, 65, 67, 68, 69, 69a, 70, 71, 71a, 72, 73, 74, 76, 81, 82, 83, 83a, 84, 85, 86, 87, 88, 89, 90, 91, 93, 94, 95, 96, 97, 97a, 98, 99, 99a, 100, 101, 102, 103, 105, 106, 107, 108, 109, 110, 111, 113, 113a, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 130, 133, 136, 136a, 137, 138, 140, 140a, 141, 152, 152a, 155, 170, 210b, 227, 267a, 268, 269, 270, 271, 272, 273, 274, 275, 276, 276a, 277, 277a, 279, 281, 290, 329a, 337, 343, 345a, 348, 384, 384a, 387a, 411, 444, 446, 446b, 446c, 447, 448, 449, 450, 456, 459, 460, 461, 461a, 462, 462a, 469, 472, 475, 520, 521, 522, 523, 533a, 551, 553, 554, 555, 556, 557, 558, 563, 565, 566, 567, 568, 568a, 569, 587, 588, 591, 599, 601, 602, 603, 604, 605, 606, 607, 611, 611a, 612, 617, 625, 626, 627, 631, 638, 638a, 639, 641, 642 and 705a.

DRAWBACK FOR HOME CONSUMPTION

That Schedule B to the Customs Tariff, 1907, be amended by providing that the following items, enumerations, and rates of drawback of Customs duties be inserted in said Schedule:

Item No.	Goods.	When subject to drawback.	
1025	Materials, not including machinery	When used prior to first day of September, 1920, in the manufacture of oleomargarine as described in The Dairy Industry Act, 1914, and amendments thereto	99 p.c.
1026	Materials	When used in the manufacture of goods enumerated in tariff items 446, 446b, 447, 448 and 591	30 p.c.

The Toronto Branch Reviews Its Work

Proceedings at the Nineteenth Annual Meeting—Net Gain in Membership During the Year—Resolutions Passed and Officers Elected for Ensuing Year

By H. MACDONALD
Secretary, Toronto Branch, C.M.A.

THE Toronto Branch of the Canadian Manufacturers Association held its nineteenth annual meeting in the Assembly Hall of the Toronto Board of Trade on May 15th, and was well attended—more particularly at the evening session, which was convened after dinner in the Luncheon Club.

Since the last annual meeting, the shift of fortune for the allied world has been incredibly rapid and complete, and the greatest war of all time ended on Monday, November 11th, at 11 a.m., French time. Confidence in the future, despite heavy war burdens, labor unrest, and disorganization consequent upon the readjustment period, was the keynote of the reports and speeches.

Mr. Thos. Roden, who assumed the duties of Chairman of the Branch in December last, upon the appointment of Major L. L. Anthes as Director of the Demobilization Branch, of the Department of Soldiers' Civil Re-establishment in Ottawa, presided.

Mr. Roden's address, in part, was as follows:

"We, who had hitherto been a borrowing country, loaned to our own Government no less a sum than $1,350,000,000, and yet had left over sufficient to extend loans of hundreds of millions of dollars to the hard pressed British Treasury. We have finished with the war, but not with war penalties or responsibilities. Our problems are in the future. There is much clearing up to be done, but our constructive work will be in peaceful pursuits. We will do well, therefore, to remove the spirit of war from among us. Industrial corporations, labor organizations, returned soldiers and educational activities should not be separated forces with latent or outspoken antagonisms, but co-operative bodies, each and every to understand the other and all recognizing obligation to the community as a first claim.

To Secure Solution

"We will not secure a sound solution of these problems by retaining chiefly a fighting spirit, however deeply we may feel the need for reform. The solution will come through patient, personal effort and through wise regulations by Governments. It will come through conviction concerning needed reforms, accomplished by good fellowship, mutual confidence and personal industry. Men engaged in industry, in commerce and educational work, as well as labor leaders should, therefore, bring wisdom and restraint into the struggle. No wild fancy will reorganize conditions. No academic dreamer will solve the problem. It must be the practical men in the factory, in the management, in the office, who must get together and co-operate in constructing an industrial fabric that will wear and stand the strain of the national law of competition.

"Mr. Lloyd George, in his appeal to the British workmen, emphasized the fact, and I feel I cannot do better than quote him:

> There is a feeling that one way of providing employment is by reducing the hours of labor so that there will be enough work to go round at the same wages. Reduce the hours of labor to what is fair, profitable and possible, but to reduce the hours of labor merely in order to create employment, paying exactly the same wage, is one way to make unemployment in the whole country. I should have thought that stood to reason.'

"In view of the division of opinion and the question of Canada's fiscal system, it might be well to inquire upon what issue the present Parliament was elected. The present Union Government was organized to prosecute the war and to provide reinforcements for the Canadian army. Neither the Government nor Parliament has any mandate to destroy the fiscal system which was maintained by both the old parties for forty years.

The Opinion of 1911

"The trade question was the issue in 1911, and the country pronounced unmistakably in favor of the existing system as against a wide measure of reciprocity with the United States, chiefly in agricultural products. The reciprocity agreement did not directly or generally inflict duties on the manufacturers. It is, therefore, no evidence that the country is favorable to the platform of the organized grain growers or that the people would reverse the decision of eight years ago.

"Until that decision is reversed by the constituencies, Parliament cannot fairly adopt a policy in direct conflict with the sentiment of the country as expressed in an election in which that issue alone divided the people.

"Last week, we had a visit from Mayor M. A. Brown of Medicine Hat, who gave to us some of the spirit of the West by his incisive declarations on the needs of our growing country east and west in industry, agriculture and science. The West is seizing the fundamentals in the application of science to its problems. They are creating a Bureau of Research to which the Province of Alberta is contributing $20,000 per annum to start with. They are surveying the Province of Alberta for a fuller knowledge of its natural resources. A business commission will analyze these reports and direct capital and industry to cooperate in its development. Capital will not be encouraged to speculate, but to invest for assured business for meeting local needs and export trade to the Coast.

"We wish them success, believing that they have grasped the right idea in linking up science and industry to accomplish the advance their great resources entitle them to.

Housing Commission

"Toronto has cause to be congratulated on the appointment of a Housing Commission composed of such representative citizens. Seldom do we recognize the sacrifice of time such responsible positions impose upon those citizens in this and similar work." (He asked that the manufacturers give the Commission the full value of their experience and assistance).

"Our Branch, at a conference with representative Ontario members, held on 20th March last, unanimously recommended to the Executive Committee of the Association the advisability of creating a Provincial organization, to be known as the Ontario Division of the Association, to include

present Branches or Sub-Branches in Toronto, Hamilton, Niagara Falls and Brantford, and any additional branches which might subsequently be organized to deal with matters having a Provincial application, leaving to the local organizations such matters as affect them locally, in view of the large number of problems having a Provincial application with which the Toronto Branch in the past has had to deal. The proposed arrangement has been approved by the Executive Committee, and would undoubtedly give better service to our members. A committee has been appointed to make all necessary arrangements accordingly, with powers, namely: Messrs. Roden, Breyfogle, Kinzinger and Champ."

In closing, Mr. Roden said: "I cannot close without expressing our heartfelt sympathy with the relatives and friends of those who, during the war, gave their lives in the service of their country. Their memories will never die."

Executive Committee

The Executive Committee's report summarized the work handled in the course of the year, including conferences through a Special Labor Committee with the Labor Sub-Committee of the Resources and Development Committee of the Senate regarding the important problems of post-war reconstruction, conferences with iron and steel users, difficulty in procuring export licenses for iron and other raw materials during the war; an improved system of promotion in the City Fire Department on the basis of examination, investigation into alleged Bolsheviki propaganda, conferences regarding the employment of returned soldiers, involving an industrial census of the city, and co-operation with the Information and Service Branch of the Department of Soldiers' Civil Re-Establishment, through which out of 6,407 applications for employment, 4,060 placements were made, being 63.3 per cent.

Dealing with taxation, the committee stated that it is evident that Dominion taxation cannot be lightened, as practically all that is being done now is the *meeting of current* requirements and interest. It was not sufficient that we rely upon the growth of population and wealth for an automatic increase in revenue. Ample provision should rather be made for the reduction of debt, even under the most unfavorable circumstances.

The coal shortage last winter was serious, and may be repeated this year, and at any future time when the production of coal for any reason falls short or transportation systems fail to cope with the situation. The committee, accordingly, advocated cheap power, in increasing quantities, as the only way to cope with what would otherwise be a hopeless situation.

Selection of Immigration

One of the most common grounds of optimism is the expectation that Canada will receive a large immigration during the next few years, not only as a result of the widespread information about Canada which has been conveyed to European countries, but also by reason of the pressure of economic conditions which is sure to result in Europe. Our immigration law must be framed so as to exercise a rigid selection, preferably from the Mother Country.

Much is to be hoped from Senator Robertson's commission on the Joint Control of Industry, particularly as the Commissioners have lost no time in carrying out their survey. Every part of the country is to be visited and a report will be available without delay, which should reveal the attitude of both labor and capital and designate to industries the way in which wage-earners may most easily be given a share in the management. With the information thus accumulated, as a basis of action, a great many employers and employees should be able to get together on a friendly co-operative basis. We are encouraged to make this prediction because of what has been accomplished in Great Britain. It is announced that the conference of employers and working men on the Joint Control of Industries has practically put an end to the serious labor unrest in that country.

The registration of students in the Central Technical School showed an attendance of 8,577, an increase over that of all previous years. The Branch provided prizes to the value of $200 for the evening school students, and the scholarship scheme inaugurated three years ago, enables the Committee to place 51 scholarships of $25 each, or a total of $1,275, at the disposal of Dr. McKay for competition by the students of the day courses.

Probably the most far-reaching step to bring the Department of Education up-to-date was the bill introduced by the Hon. Dr. Cody, Minister of Education, at the recent session of the Ontario Legislature, to provide for the compulsory school attendance of adolescents between 14 and 18 years of age, and also the announcement that the text-books were shortly to be revised.

The Educational Committee referred to the generous gift by Sir John Eaton, a member of the Branch, of $25,000 a year for 20 years for a chair of clinical medicine in Toronto University.

The Canadian National Exhibition Committee's report told of an increase in the number of exhibits, and added that it was gratifying to have agriculture out in such force. All the leading lines of Canadian tractors were in evidence, the shortage of farm help naturally creating a new interest and a big demand for Canadian-made tractors.

Secretary's Report

The report of the Secretary, H. Macdonald, showed that 45 applications for membership had been received and 32 resignations, due to firms discontinuing business and amalgamations, some lines being adversely effected by the abnormal trade conditions. The membership of Toronto Branch is now 833 firms and corporations.

Ontario's Legislature was in session this year for the best part of eight weeks. During that period, 180 bills were considered, against 147 bills last year—most of them private or public measures that affect comparatively few people of the Province, but there were 30 to 40 Government measures that were put through this year that are of the greatest importance. Every person will be affected by some of them to a greater or lesser extent. All of these bills were examined by the Secretary.

The Bureau of Advice and Information received numerous enquiries during the year, its services unquestionably saving a considerable amount to the manufacturers. It recommended that advertising schemes in particular should, when any doubt exists, be referred to the Bureau of Advice and Information before any contract is made.

Mr. K. Dunstan, President, Board of Trade, delivered an address, giving various interesting suggestions as to the best form of a War Memorial for Toronto.

In the course of an address on "Technical Education," Dr. A. C. McKay, LL.D., summarized the rapid extension of the Technical Schools and the necessity for further enlargement.

Mr. J. Maguire (industrial expert) dealt with co-operation in industry. He declared that wild-eyed agitators have been quick to seize the opportunity presented by the transition period, following the cessation of hostilities, and to seek to lead labor to some Utopia of their own imagining. It is between this course and a re-action which would deny labor its just rights, that labor must look for a safe course.

Col. J. B. MacLean suggested that as the aims of labor are akin to those of the Manufacturers' Association, representatives of labor should be invited to the meetings.

Major L. L. Anthes delivered an interesting address on the work of demobilization, and expressed the appreciation of the Government for the effective assistance rendered by the manufacturers.

Addresses were also delivered by Messrs. S. R. Parsons, J. S. McKinnon, J. F. MacKay, Sam Harris, and R. S. Gourley.

Resolutions were passed as follows:—

Technical Education and Vocational Training

That the Toronto Branch of the Canadian Manufacturers Association, in annual meeting assembled, recommend the next annual meeting of the Association to earnestly urge upon the Dominion Government to enact legislation in the present session of Parliament, for the purpose of promoting and assisting technical education in Canada, and that to this end a Technical Education Board of Canada be created on a permanent basis for the purpose of formulating a comprehensive policy of federal aid to industrial education and technical training in all the provinces of Canada.

Canadian Tariff

That the Toronto Branch of the Canadian Manufacturers Association, in annual meeting assembled, protests against any interference with the tariff of Canada until a Commission is appointed to thoroughly investigate and to devise a tariff which will be equitable and just to all classes and that will best serve the welfare of the country as a whole;

And that a copy of this resolution be sent on to the forthcoming annual meeting of the Association for further discussion and action.

Industrial Relations

That the Toronto Branch of the Canadian Manufacturers Association, in annual meeting assembled, cordially welcomes the appointment of a "Royal Commission on Industrial Relations," created under Order-in-Council dated April 4th, 1919, *inter alia*, "To consider and make suggestions for securing permanent improvement in the relations between employers and employees," and recommend to the next annual meeting of the Association that it pledge its co-operation and support to the Dominion Government in its timely efforts towards a fuller knowledge of industrial conditions, and consequently of better relations between capital and labor.

Civil Service Reform

That the Toronto Branch of the Canadian Manufacturers Association, in annual meeting assembled, place itself on record as being strongly in favor of the elimination of patronage in connection with all Government appointments in Ontario, and hereby earnestly advocates adoption by our Provincial Government of the principle of competitive examination on a similar basis to the examinations of the Dominion Civil Service Commission, coupled with an adequate and liberal scale of salaries, which will attract and retain candidates of talent, ability and experience.

The following officers were elected for the ensuing year:—

Chairman—Mr. W. C. Coulter (by acclamation), Booth Coulter Copper & Brass Co., Limited.

Vice-Chairman—E. H. Gurney (by acclamation), The Gurney Foundry Co., Limited.

Executive Committee—C. H. Carlisle, Goodyear Tire & Rubber Co., Ltd.; F. S. Corrigan, Sheet Metal Products Co., Ltd.; R. H. Easson, Otto Higel Co., Ltd., E. J. Freyseng, Freyseng Cork Co.,, Ltd.; Albert H. Gourlay, Gourlay, Winter & Leeming, Ltd.; T. A. Hollinrake, A. R. Williams Machinery Co., Ltd.; Walter Laidlaw, R. Laidlaw Lumber Co., Ltd.; R. L. McIntyre, McGregor & McIntyre, Ltd.; John Millar, Lever Bros., Ltd.; T. F. Monypenny, Imperial Varnish & Color Co., Ltd.; J. Allan Ross, Wm. Wrigley, Jr., Co., Ltd.; J. A. Scythes, Scythes & Co., Ltd.; E. G. Staunton, Stauntons, Ltd.; H. A. Telfer, Telfer Bros., Ltd.; Geo. W. Watts, Canadian General Electric Co., Ltd.; I. H. Weldon, Provincial Paper Mills Co., Ltd.; J. Westren, Dunlop Tire & Rubber Co., Ltd.

Representatives to Canadian National Exhibition Association—T. A. Russell, Russell Motor Car Co., Ltd.; George Brigden, Brigdens, Ltd.; S. H. Chapman, Hurley Machine Co., Ltd.; W. C. Coulter, Booth Coulter Copper & Brass Co., Ltd.; John Firstbrook, Firstbrook Bros., Ltd.; E. J. Freyseng, Freyseng Cork Co., Ltd.; S. Harris, Harris Lithographing Co., Ltd.; G. T. Irving, Irving Umbrella Co., Ltd.; J. S. McKinnon, S. F. McKinnon Co., Ltd.; J. P. Murray, 67 Bond St.; Thomas Roden, Roden Bros., Ltd.; Frank A. Rolph, Rolph-Clark-Stone, Ltd.

Representatives to the Executive Council—Major L. L. Anthes, Anthes Foundry, Ltd.; Geo. Brigden, Brigdens, Ltd.; Thos. Findley, Massey-Harris Co., Ltd.; John Firstbrook, Firstbrook Bros., Ltd.; E. J. Freyseng, Freyseng Cork Co., Ltd.; Victor C. Harding, Toronto Carpet Mfg. Co., Ltd.; S. Harris, Harris Lithographing Co., Ltd.; T. A. Hollinrake, A. R. Williams Machinery Co., Ltd.; Walter Laidlaw, R. Laidlaw Lumber Co., Ltd.; L. L. McMurray, Gutta Percha & Rubber, Ltd.; T. F. Monypenny, Imperial Varnish & Color Co., Ltd.; J. A. Riordan, Standard Sanitary Mfg. Co., Ltd.; Thos. Roden, Roden Bros., Ltd.; Frank A. Rolph, Rolph-Clark-Stone, Ltd.; J. Allan Ross, Wm. Wrigley, Jr., Co., Ltd.; J. F. M. Stewart, Point Anne Quarries, Ltd.; George W. Watts, Canadian General Electric Co,, Ltd.

Report of the Committee on Welfare

IT is recognized by all thoughtful people that a better understanding between capital and labor is necessary, if the grave problems of reconstruction are solved with the maximum success and benefit to Canada. Between 1,500,000 and 2,000,000 persons will be affected vitally by demobilization and consequent industrial changes. Unless there is sympathetic understanding and sincere co-operation between employers and employees, industrial machinery cannot be adjusted to the new conditions without severe loss to capital, extensive unemployment and individual distress. Conditions which are the cause of the present labor troubles must be corrected or graver disturbances will mark the course of the reconstruction period. Much of the present disquiet is due to high prices, and much of it also to specific industrial causes. Amongst these are the failure hitherto of capital to admit the human rights of labor, the domination of extreme elements in labor organizations and the ancient and still active distrust between labor and capital. These causes must be corrected in the interests of industry and of the nation.

The war, as nothing else in human history, has broken down the wall of partition between classes. All have responded to a common appeal and all have shared in common sacrifice and common glory. Unless there is a mortal and ineradicable defect in our civilization there will be fruits of sympathy and understanding from all this common effort. In Great Britain those who are regarded as labor agitators have become sober and responsible Imperial statesmen, as probably they always were, if we had understood them. No one in the United States has revealed more of the spirit and stature of a statesman than Samuel Gompers Those who reviled Mr. Lloyd George are his colleagues in the Imperial Government; those whom he reviled are his friends and comrades. It is not clear that those Labor and Radical leaders in Great Britain and the United States have become more conservative; it is certain that many of those who contended against them have become less conservative.

Not a few wild theories and fantastic panaceas have been tested in Russia with consequences of ruin and horror beyond imagination. Yet there are disciples of the Bolsheviki in the United States and even in Canada.

Speaking in England, Mr. Hughes, the Labor Premier of Australia said: "Bolshevism is no new thing to us. There is nothing new in its shibboleths, which were to set up a new heaven and a new earth, in which all things would come to men who did not deserve them. These shibboleths are being adopted by an increasing section of the country

from which I come, but the country is now being swept by the fierce winds of war, and men see that they have to look to a world as it is." There is reason to fear that many of these irresponsible apostles of revolution are the subsidized agents of Germany seeking to destroy by internal dissension in the ally countries the political authority and the free institutions which German arms could not overcome. But the Canada that we have saved by sacrifice and valor, we must not destroy by incendiary agitation or rash and empirical legislation. There is safety only in sympathetic co-operation between employers and employees, and frank recognition of the actual identity of interest between capital and labor.

Rockefeller's "Colorado" Plan

The value of co-operation and frank recognition of the rights of labor is indicated in the success which Mr. John D. Rockefeller, Jr., reports of the "Colorado" plan, after a careful inspection of the results of that industrial brotherhood experiment at the plants of the Colorado Fuel and Iron Company. In 1915, after the mines and steel mills had been the scenes of serious strikes, Mr. Rockefeller went to study the situation. He told the men he was firmly resolved to maintain in every respect the open-shop principle; that he meant to bring capital and labor nearer together, and that he was determined that every employee should have a prompt hearing and fair treatment. To the miners he proclaimed the doctrine that labor and capital are natural partners, not enemies. In the *Atlantic Monthly* he wrote: "With labor and capital as partners, wealth is created and ever greater productivity made possible. In the development of this partnership, the greatest social service is rendered by that man who so operates in the organization of industry as to afford to the largest number of men the greatest opportunity for self-development and the enjoyment by every man of those benefits which his own work adds to the wealth of civilization. This is better than charity or philanthropy; it helps men to help themselves and widens the horizon of life. Through such a process the laborer is constantly becoming the capitalist, and the accumulated fruits of industry are made the basis of further progress."

As the result of a visit of inspection, Mr. Rockefeller in August authorized the publication of the following statement: "I spent two weeks visiting the twenty or more camps and steel mills of the Colorado Fuel and Iron Company. I talked with practically all of the representatives in the camps and mills. The outstanding results of the operations of the plan have been as follows:

1. Uninterrupted operation of the plants and increased output.
2. Improved working and living conditions.
3. Frequent and close contact between employees and officers.
4. Elimination of grievances as a disturbing factor.
5. Good-will developed to a high degree.
6. The creation of the community spirit.

This community spirit has produced striking results. Club-houses have been constructed in a number of the camps which provide recreation and social facilities, not only for the men and boys, but for the women and children as well. There are band stands in a number of the camps, and bath-houses in practically all of them. In several, dispensaries have been built and supplied with district nurses.

Schools have been improved; some would serve as models in any city. One of the most important features is the gardens that have been generally cultivated. The community spirit is developing community pride and rivalry.

Representatives of the men in the camps and mills, Mr. Rockefeller reports, intimate that all grievances have been adjusted to the satisfaction of the employees, are in process of adjustment, or the employees have been convinced that their grievances were not well founded.

In Great Britain a sub-committee of the Government Reconstruction Committee was appointed:

1. To make and consider suggestions for securing a permanent improvement in the relations between employers and workmen.

2. To recommend means for securing that industrial conditions affecting the relations between employers and workmen shall be systematically reviewed by those concerned with a view to improving conditions in the future.

The result of the sub-committee's initial deliberations was what is better known as the "Whitley Report," a statement advocating the establishment of Industrial Councils. The sub-committee, which devoted its attention first to the main industries of the country in which there existed representative organizations on both sides, found it essential that "any proposals put forward should offer to work-people the means of attaining improved conditions of employment and a higher standard of comfort generally, and involve the enlistment of their active and continuous co-operation in the promotion of industry." To this end, the sub-committee reported that "the establishment for each industry of an organization, representative of employers and work-people, to have as its object the regular consideration of matters effecting the progress and well-being of the trade from the point of view of all those engaged in it, so far as this is consistent with the general interest of the community, appears to us necessary."

Industrial Councils

The sub-committee, therefore, recommended to the Imperial Government the formation of Joint Standing Industrial Councils in the several industries, where they did not already exist, composed of representatives of employers and employees, regard being paid to the various sections of the industry and the various classes of labor engaged.

The National Industrial Council was not regarded as complete in itself. The sub-committee advocated "a triple organization in the workshops, the districts and nationally." It, therefore, advised that the following proposals should be laid before the National Industrial Councils:

"(*a*) That District Councils, representative of the Trades Unions, and of the Employers' Association in the industry, should be created, or developed out of existing machinery for negotiation in the various trades.

"(*b*) That Works Committees, representative of the management and of the workers employed, should be instituted in particular works to act in close co-operation with the district and national machinery."

It is significant that the sub-committee specifically advised that membership in the Councils should be confined to representatives of Trade Unions and Employers' Associations, and that new organizations should be admitted only with the approval of the particular side of the Council of which the organization would form a part. Its members further refrained from expressing opinions with regard to profit-sharing, co-partnership, or particular systems of wages, etc., being convinced that "a permanent improvement in the relations between employers and employees must be founded upon something other than a cash basis. What is wanted is that the work-people should have a greater opportunity of participating in the discussion about and adjustment of those parts of industry by whch they are most affected."

The Whitley Report, issued on March 8th, 1917, demanded recognition of the human rights of labor. That is the new spirit in industry. The report excited profound interest not

not only in Great Britain but on this continent. Important developments quickly followed, industrial schemes being drawn up involving millions of work-people, though there are still wide differences of opinion as to what powers an Industrial Council should exercise, whether or not penalties should be imposed upon recalcitrants and how penalties, if imposed, should be enforced. The Whitley Committee condemned compulsory arbitration and opposed enforcement of awards and agreements by pecuniary penalties. The British Industrial Reconstruction Committee urges the Government to bring employers and employees together by systematic appeal and action. The National Alliance of Employers and Employed insist that after-war industry must have self-government. It argues that this self-government can be achieved by employers and employees working together with equality of representation and free from outside interference. "Through that co-operating work," the Secretary of the Alliance declares, "they are reaching a mutual understanding and a realization of the fact that their interests are identical and not antagonistic, and they are agreed that along these lines the industrial future can be assured."

"Industrial Relationship" in Canada

The most comprehensive attempt that has yet been made in Canada to create a community of interest and feeling between capital and labor has been put in operation in the plants of the Imperial Oil Company, Limited, which are placed at stragetic points from the Atlantic to the Pacific. It is known as the "Industrial Relationship" plan, and has already proven a success in certain of the plants of the Standard Oil Company in the United States, and has met with favor among the workers. Apart altogether from the special benefits involved, the system is unique in that it gives to the worker a co-operative voice in the adjustment of wages and conditions of labor, and introduces the principle of collective bargaining by elected representatives of the wage-earners.

The announcement of the adoption of this plan was made at Sarnia on December 19th, 1918. It is a project national rather than local in its application. The plan is no ill-digested project, hastily taken up to meet the prevailing ferment in labor circles; but one that has received full and deliberate consideration.

"Collective Bargaining"

The system of "collective bargaining" begins by extending to the men the privilege of electing their own delegates as members of a representative body by a free and secret ballot. Such delegates are elected in the ratio of 1 to 75. So vast a number of trades and expert callings enter into the oil industry that the employees have been classified into four elective groups. The first consists of ordinary trades like masons, carpenters, boilermakers, blacksmiths, etc., which elected five delegates; the second of yard laborers, drivers, stablemen, etc., which chose three; the third of special callings like the candle-makers, paraffine workers, etc., which selected two; the fourth of refinery hands, stillmen, acid workers, etc., which chose five. The Industrial representatives so elected at present represent thirteen trades.

It is proposed that grievances, etc., shall first be dealt with by the divisional delegates of the group particularly affected. If they cannot be simply rectified, they will be placed before the joint committee. Should the latter body be unable to arrive at a satisfactory solution, an appeal is provided for to the president or his authorized representative. The employees are given a "Bill of Rights," under which, except under certain provided exceptions, no man or woman can be dismissed without having a fair hearing, with his fellow-employees participating in the deliberations on his case. The exceptions chiefly consist of breaches of discipline which endanger the lives of fellow-employees. The company will maintain an open-shop without discrimination against unions, or against any man on the ground of creed, color or opinion. In the case of a temporary or prolonged lack of employment in any particular trade, it is proposed to avoid the hardships of laying-off men by a system of transfers to departments where more help is needed. The joint committee of workers and officials will also initiate measures for the improvement of conditions and make recommendations that will be heeded and favorably entertained by the company on questions of sanitation, recreation, and various matters affecting social conditions.

These details are sufficient to show the comprehensiveness of the "Industrial Relationship" plan so far as the wage-earner is concerned. This, however, though the more important as a step in the direction of improving relations between labor and capital, is but one phase of the company's plans. The late Hon. W. J. Hanna, president, speaking of the community of understanding, used the following sentence: "We cannot by our own inaction, by blind refusal to see that the old is giving way to the new, and that the war was a part of the re-making of the world, ignore the lesson of the brotherhood of the battlefield."

"Welfare" in Ontario Plants

Impressed by these striking industrial developments, it was natural that your Committee should have arranged a conference of manufacturers in the Association's Board-room, which was held on 18th March last, at which Mr. Williams, of Kitchener, explained the experience of his firm. The firm of the Williams, Greene & Rome Co., Limited, started business in Toronto in 1881, realized, after four years' experience, their inability to make progress on the old line.

Moving to Kitchener, they organized their departments, developing a system of "Welfare" work, involving good wages based on results, good sanitary conditions and representation on a joint committee. A plan was worked out under which every new idea by the employees was handled by the joint committees. They recognized that everyone had some ability which was worth cultivating.

They formed a library with 300 volumes, the books being bought by the workers, and the company paying for the book-cases. Although there is a good library in the town, the employees' library continues to be freely used.

The firm provided a girls' rest room with a bath by building a new addition to the factory—a facility which was greatly appreciated at the time, as there were no baths in many of the workers' houses.

A dry room was added to the building where a change of footwear and clothes could be procured, thus reducing sickness by 33⅓ per cent.

Before engagement, every new superintendent is presented to the committee, whose approval is obtained.

The travellers were and are brought into counsel in every way possible, and they meet in conference in the office every week. They are members of an advisory committee—eleven being stockholders in the company.

No employee is allowed to be spoken to other than in a courteous manner in the plant.

The firm gave assistance to start a "benefit society"; and the town is divided into five wards, a representative being appointed in each ward to attend to sick cases.

A summer camp has been established where their married workmen with their families may go for rest and re-

creation. They close their plant for two weeks every year. if through sickness at home workers cannot go to the summer camp, the firm pay them double wages. A feature of the summer season is the Annual Picnic for which everything is found by the staff of travellers.

The top floor of the new building is used as a dance hall, the accommodation also being used for public meetings, and a "Welfare" director is appointed to whom every question is referred from the president.

The working hours have been reduced to nine, and the employees do not work nights.

A box has been put in position where complaints may be deposited and where also suggestions by employees may be placed, these replies being regularly acknowledged and the sender thanked.

Your committee find that the plan worked out by Mr. Williams showed:

1. A remarkable spirit of unity and co-operation between employer and employees.
2. A high standard of comfort and independence of the workers.
3. An elevated moral and ethical standard in the factory, shown in the town life—besides the plan worked out has proved financially profitable.

On 8th of April last, the committee, as directed by the conference held on the 18th of March, visited Kitchener and was received by Mr. Williams, who forthwith detailed four of his managers who led the deputation in groups over the various departments of the factory.

The delegation was much impressed with the architectural features of the factory, while the internal arrangements and staff organization presented a general appearance of order, discipline, and efficiency, showing that under the "Welfare" plan worked out by Mr. Williams, the largest possible measure of co-operation between employers and employed was being obtained. A feature of the organization in the factory is the latitude allowed to employees to work out plans on their own account without undue interference by the management.

Recreation and Amusement

While due consideration has been given to the working conditions in the factory, special attention has also been given to facilities for recreation and amusement. A well-equipped dining-room and kitchen has also been provided in charge of the employees, which has been managed to the entire satisfaction of the directors. An open air arena on the top of the building, which is used for recreation and amusement purposes, is specially appreciated in the heat of summer.

Mr. Williams, in referring to the success attained by "Welfare," stated that any sacrifices already made, or to be made, would be repaid tenfold. They were not antagonistic to "labor," and they invited other industries to follow the course successfully pursued by themselves. The factory had been built up by co-operation between employers and employees.

Mr. W. J. Roberts, speaking on behalf of the employees, stated that the success attained had been reached by honest co-operation on the part of both Mr. Williams and his employees. Mr. Roden, speaking on behalf of the delegation, stated that the cause of apparent differences in the past arose from ignorance of each other's problems, and that the present serious situation with which industry was confronted could only be met by co-operation, not only as between employers and employees, but also as between the farmer and the manufacturer.

Reference should be made to the recent celebration by the Massey-Harris Co. of the beginning of a new system of co-operative endeavor, which has been inaugurated in their plant which promises the maximum of results. At the recent meeting to inaugurate the plan, the president told of the various steps which led up to the new system, the first of which was the shortening of the hours, the installation of a cafeteria and other conveniences.

Mr. Findlay also told of the action of the Board of Directors to render systematic aid to the various employees' and sick benefit societies, where a pension fund would also be established for old employees. It has also been decided to allow employees of the company to become shareholders in the business, a plan for which will be devised, whereby the shares will be paid for in small monthly sums as were paid for Victory bonds and the like. Another revolutionary plan announced by Mr. Findlay will be the inauguration of a Workmen's Council for each factory, the purpose of which is to establish a direct point of contact between the employees and the management.

Some General Observations

Signs multiply every day of combination of interest between employer and employee. Your Committee believe that in the highest interests of the state and of every individual and class, capital and labor ought to be co-operating to improve efficiency and increase production. In order that the state may meet the new burdens imposed by the war, employers and employees alike must resolve to turn their minds to new ideas of production and be prepared to accept changes which will increase the national volume of wealth as the only way in which permanent employment and prosperity can be achieved.

Clearly we are geting nearer to conditions in which the claims of great groups of workmen who are more or less organized can be settled on lines which to the men will mean better conditions and which, to the employers and the community, will mean avoiding the losses entailed by strikes and industrial unrest.

While the Whitley Committee condemns compulsory arbitration, a contrary view is entertained by some centres in Canada at least. At the last session of the Manitoba Legislature, an "Industrial Conditions Act" was passed which definitely recognizes that disputes between employers and employees, which retard industrial development, should be prevented or settled speedily without interruption to industry. This Act is the first statutory enactment by a Provincial Government in Canada, providing simple and effective machinery for the settlement of industrial disputes by a Joint Council of Industry, subject to statutory direction and control. The Council consists of five persons—two representing employers, two representing employees, with an impartial chairman. The Council is endowed with the power of a civil court and is practically a local authority on general "Welfare" on behalf of industrial workers.

A Closer Association

Thus a new industrial machinery is being created and the common impulse is clearly towards the close association of capital and labor.

The important needs for future enjoyment of the fair prospect before us, perhaps above all else, are aggressive, individual leadership with federal government co-operation, capital unintimidated and labor prepared and contented. The whole country must have a vision of the end in view. It must think of the future in terms of big factories, skilled workmen, large steamships berthed and manned in Canada, expanding trade figures and a national prosperity undreamed of in the past.

Successful Annual of Montreal Branch

Branch Makes Net Gain of 34 Members During the Year—Committee Reports Evidence Much Good Work—Important Resolutions are Passed—Retiring Chairman Delivers Admirable Address

By W. P. HUGHES
Secretary, Montreal Branch, C.M.A.

ONE of the most successful annual meetings which the Montreal branch has ever held, took place in the Ritz Carlton Hotel, Montreal, on Thursday evening, May the 22nd. One hundred and forty members were present to receive the annual reports and to enjoy the addresses, which proved to be exceptionally bright and interesting.

For the first time in a number of years nominations for the incoming Executive Committee exceeded the number to be appointed, and therefore an election was necessary. The chairman, vice-chairman and two members of the Committee, resident outside the City of Montreal, were elceted by acclamation. But for the twelve places to be filled by members within the city limits there were seventeen nominations, and a lively contest ensued. The result as announced in the annual meeting was as follows:

Chairman—W. J. Sadler, Sadler & Haworth.
Vice-Chairman—F. W. Stewart, Cluett, Peabody & Co., Ltd.
Outside Members—W. H. Miner, Miner Rubber Co., Ltd.; John Lowe, Montreal Cottons, Ltd.
Local Members—A. H. Brittain, Maritime Fish Corporation; A. A. Bittues, Gillette Safety Razor Co. of Canada, Ltd.; W. S. Fallis, Sherwin-Williams Co., Ltd.; Art. Harries, Canada Paper Box Co., Ltd.; George Henderson, Brandram-Henderson, Ltd.; John Irwin, McArthur, Irwin, Ltd.; Lt. Charles Presby Slater, George A. Slater, Ltd.; Julien C. Smith, Canada Carbide Co., Ltd.; Eugene Tarte, La Patrie Publishing Co., Ltd.; James L. Waldie, Canadian Tube & Iron Co., Ltd.; H. H. Williams, Canadian Vickers, Ltd.; F. R. Whittall, A. R. Whittall Can Co., Ltd.

Mr. Michael Hirsch, retiring chairman of the Municipal Affairs Committee, was the mover of two important resolutions which were unanimously passed by he meeting. The first recommended that the Association General Convention memorialize the Dominion Government to the end that strikes by policemen or firemen be made a criminal offence. The second congratulated Montreal's new civic administration on the success of their first year of work in keeping down expenditure and improving the financial standing of the city. The first resolution was as follows:

Whereas, constant and adequate police and fire protection are indispensable wherever people live in close proximity to one another as they do in all our cities and towns;
And whereas, grave dangers to life and property and injury to the public welfare immediately result from any interference with the continuity and adequacy of this protection;
And whereas, in the past such civic employes have occasionally forsaken in a body the performance of these duties;
And whereas, such concerted action cannot be justified in any circumstances;
Be it therefore resolved that the Montreal branch of the Canadian Manufacturers Association in Annual Meeting assembled on this, the 22nd day of May, 1919, urgently recommends to the general convention of the Association that this matter be the subject of memorial to the Dominion Government to the end that legislation be enacted making an organized strike among such civic employees a criminal offence while, at the same time, making ample provision for the redress of any grievances and the hearing of any complaints.

The address given by the retiring chairman, Mr. C. Howard Smith, was listened to with the closest attention. (Mr. Smith's complete address will be found on page 59).

The report of the Branch Reception and Membership Committee evidenced a material growth in the membership during the year. Forty-four applications had been received and ten resignations recommended, leaving a net gain of thirty-four. It was pointed out that in every case the resignations were due to a discontinuance of business. This, it was affirmed, was by far the largest percentage of increase which the branch had enjoyed for a number of years and was in itself a marked recognition of the Association's endeavors during the past twelve months on behalf of its members.

The report of the Legislation Committee mentioned the opening of the Ottawa office, under the guidance of Mr. G. M. Murray with his able assistant, Mr. E. Blake Robertson, and



—*B. and C. Press Photo*

Lt.-Col. Walter Sadler
Elected Chairman, Montreal Branch, C.M.A.

expressed a warm tribute to Mr. Murray for the most valuable service he had rendered manufacturers through his work at Ottawa. This report also reviewed what the committee had done in connection with both Dominion and provincial legislation throughout the year. Mention was made of the Dominion Bankruptcy Act, the Quebec Commercial Corporations Tax Act, and the Quebec Workmen's Compensation Act, to which the Committee had given a great deal of study, and in connection with which satisfactory results had been obtained.

After reviewing the activities of the Municipal Affairs Committee during the year in connection with such matters as the civic administration, the epidemic of Spanish influenza and the civic employees' strike, the chairman of that committee intimated that the question of a Municipal Information Bureau was one which had lately been given considerable study and recommended that the incoming committee carry the project forward to completion without delay.

The secretary's report reviewed several of the more important matters which had been dealt with by the branch, but which did not fall within the reports of the various standing committees. Under the general head of Industrial

Reconstruction and Development, many problems had received the close attention of the Executive Committee and appropriate action was taken with respect thereto. It was pointed out that the signing of the armistice had brought problems to the manufacturer no less knotty than those attendant upon the declaration of war itself. During the years of war a sentiment of "common cause" had linked all classes of the people together. Party and group feelings had given way before the necessity for co-operation, without which it would have been impossible to co-ordinate the country's war effort. Team work had been the slogan in the great game of winning the war. But with the signing of the armistice a reaction in sentiment had come which agi-



F. W. Stewart
Cluett, Peabody & Co.
Vice-Chairman, 1919-1920, Montreal Branch

tators and trouble-makers were doing their best to use in a selfish and shortsighted way for the advantage of ther particular class. The Executive Committee in almost every meeting throughout the year had taken up some phase or other of these reconstruction problems. Industrial relations and the tariff were two which had given the most concern. The report told of the conferences with the representatives of labor, which had been held in Ottawa to which members of the Executive had gone, and which had resulted in important recommendations being laid before the Dominion Government as the joint memorial of employers and organized employees.

The publicity campaign, which had been carried on by the Association in connection with the tariff, had been closely followed and heartily concurred in by the local executive. An endeavor to place before the Dominion members of Parliament the opinions of manufacturers and their employees with reference to the tariff issue had been energetically carried forward.

The Boards of Trade and Chambers of Commerce throughout the province had been circularized, some two hundred petitions bearing approximately twenty thousand signatures had been forwarded to the members of Parliament for the constituencies in which manufacturers in the province were located, and in short much educational wor in this connection had been effected.

Local educational facilities had also been the subject much activity on the part of the Executive Committee. co-operated with the Protestant Board of School Commi sioners in securing a much needed increase in their r venues. Representatives had been appointed on the Boar of Directors of the Montreal Technical Institute and a sma committee to act on the Advisory Board which supervises th curriculum of the Montreal Technical School. Altogether marked increase in the interest taken by the branch in loc educational affairs had been evident throughout the year.

The changes in the staff of the Association were spoke of and the satisfaction which the Committee had felt in th work of the new general manager, Mr. J. E. Walsh, was sui ably expressed.

Nine meetings of the Executive Committee had been he during the year with an average attendance of seventee Two meetings of the Executive Council had been held Montreal which were well attended and keenly appreciate by the local members of that body.

Addresses delivered

Following the business meeting, an informal dinner wa enjoyed by the members, after which they listened to tw very able addresses. The first was by Mr. H. H. Stevens, M. for Vancouver Centre, on the Labor situation. Mr. Steve did not mince matters, but spoke earnestly out of a full e perience of the great principles which must underl amicable relations between employer and employees. H strongly urged the necessity for co-operation based fund mentally upon confidence and justice. He pointed out th prodigality on the part of the wealthy and the flaunting war profits in the eyes of the workers by men made ri through war conditions were two of the greatest causes the present unrest. He was optimistic as to the outcon of the attempt by Bolsheviks to sow seeds of revolution Canada. These he contended could not take root, since co ditions here were entirely different to those in Russia a other countries where our democracy system has not pr vailed. He urged that no person should be permitted settle in Canada who did not give promise of becoming useful citizen in this democracy.

On the other hand, he disagreed with the desire e denced by some to suppress the radical speech of the s called "Reds," so long as such sentiment was confined talking and did not express itself in violence. To suppre ideas such as these, Mr. Stevens contended, would tend intensify their activity in secret, and nothing could be mo harmful to the country than such a result.

His remarks were punctuated with much applause a the address was acknowledged by all to be one of the mo meritorious which the branch had heard for a long time.

Mr. C. M. Bigelow, of Cooley & Marvin, Boston, gave practical talk on production methods and costs control. H insisted that no one could give a manufacturer a syste that could be universally applied with complete results. Ho ever, he maintained that there were principles which mu underlie any business if it was to succeed in securing maximum efficiency in production. The chief of these pri ciples were honesty and fair play in applying the fo fundamental rules of production.

During the evening solos were rendered by Mr. Marsh and Mr. Rettie, that were highly pleasing to the gathering.

The general impression brought out in the annual me ing was that the branch was in a very healthy condition a ready to take up the serious problems which would confro Canadian manufacturers during the coming year.



Entrance to the Lachine Canal, Montreal

Some of the Problems Confronting Manufacturers

Chairman's Address at Montreal Meeting

By C. HOWARD SMITH
Chairman, 1918-19, Montreal Branch, C.M.A.

WE are once more met together in annual convention to take a survey of the past year and to determine ow best to meet the new conditions that, as business men, nfront us.

A year ago we were still in the midst of war. The outok was far from cheerful. To-day we have emerged from e war completely victorious and are on the verge of a eace which promises to be both salutary and lasting. It is eedless for me to indulge in any platitudes concerning the ar, its causes and its issues. We know that it was not of ir making, nor of our seeking. We played our part in it conscience and duty dictated. We are satisfied with the itcome. Beyond this, if I may say so, we are too close to e catastrophe to be able properly to estimate its true gnificance; to formulate a correct theory as to why such appalling tragedy should be visited upon a helpless world this supposed age of enlightenment—that is a task for ir children and our children's children, who will be able view events in a more illuminative perspective. What we e confronted with is the more immediate task of meeting nditions as they are and of helping, to the best of our ility, to put things back on a stabilized basis.

When Charles Schwab, the great American organizing nius and business expert, who gave his services freely to s country during the war, was recently asked, "Now that e war is over, what do you advise?" he replied, "Forget it, d get back to work."

Reconstruction

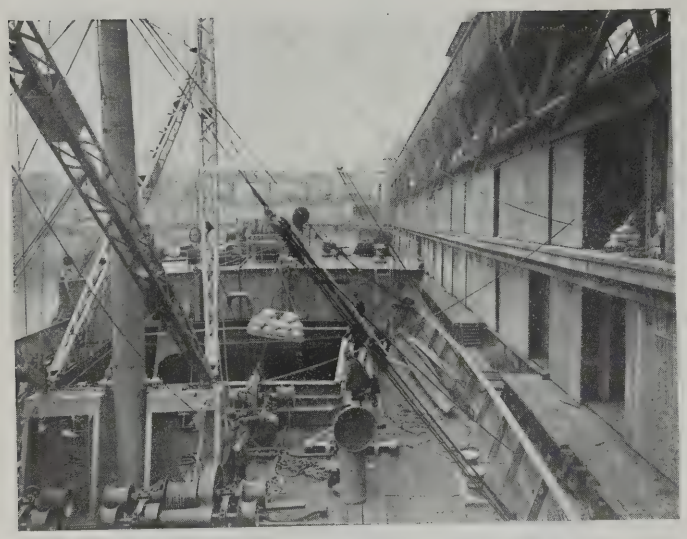
We cannot, of course, "forget it" in a literal sense, nor, deed, would it be well for us to do so, but there is much commend in the suggestion that the duty of the present oment is to devote ourselves exclusively and to the full tent of our powers to "getting back to work"—to reconucting the industries which were suspended during the r period; to building up new ones; to providing employnt at remunerative wages for all who want it; to contriting to the wealth and well being of Canada as a nation.

This is a task that peculiarly appeals to members of the nadian Manufacturers Association. It is up to us to blaze e trail back to national prosperity and national contentnt. Given reasonable opportunity we can and will provide ployment for the men released from war service and rened to civilian walks of life. We are anxious not only to keep the old wheels moving, but to start as many new ones as possible. But we can only do this if granted reasonable freedom from undue restrictions on the part of the Government, on the one hand, and are met by a fair and reasonable attitude on the part of labor on the other. Industry in this country cannot thrive if unduly oppressed or if conditions are forced upon it beyond its powers to meet.

The Tariff

One of the most serious situations confronting the manufacturers to-day is the demand from the west for a radical revision of the tariff. The western grain-grower, looking at the subject solely from the viewpoint of self-interest and without any regard to its national aspect, has been led to believe that in tariff reform, with as near an approach to free trade as he can get, is the country's only means of salvation. He is bringing strong pressure to bear at Ottawa to enforce his views.

It is not necessary or desirable at this time to go into an extended discussion of the merits or demerits of a protective tariff. They are too well known to all of us to require enumeration. It is pertinent, however, to observe that the present is no time to introduce measures intended to upset Canada's accepted fiscal policy for the past forty years. Quite apart from the influence of a protective tariff upon the upbuilding of Canada's industries, consider for a moment the financial situation which confronts us. Before the war Canada's national debt of $336,000,000, was looked upon with some misgiving and regarded as an undue burden for a nation of eight millions of people to carry. To-day our public debt is nearing the two billion dollar mark, and will probably exceed that sum before our immediate obligations incurred in carrying on the war are provided for. This will impose carrying charges upon the country greater than our total revenues amounted to a decade or so ago. Then we have the extraordinary obligations such as the Government at Ottawa is now assuming—an estimated $60,000,000 annual deficit in railway operating account; a $25,000,000 appropriation to assist the provinces in building houses for their people, a $50,000,000 shipbuilding appropriation; another $50,000,000 canal undertaking, large appropriations for the advance of technical education, good roads and other things, most of them entirely worthy in themselves if the money to pay for them were available. This year's estimates for public



Canadian Flour for Italy

Loading the "War Redcap" at Montreal with a cargo of flour for Italy

purposes, according to a statement made in the House by the Hon. F. B. Carvell, will exceed the estimated revenue by some $300,000,000. Where is this money to come from? True, there are new tax imposts, such as the income tax, the business profits tax and various other taxes, which will necessarily be subject to an increase, but with all these the Government's income will still fall far short of its requirements and will continue to do so for years to come. How can it, then, seriously be proposed to abolish in large part what is and has always been the Government's chief source of reliance for its revenue—the duties collected on imported manufactures? Heaven knows, if the imposition of such duties was ever justifiable from a national standpoint it is trebly justifiable to-day, as well as being absolutely necessary.

Scientific Inquiry Needed

But even if there were any virtue in the demand for a low tariff or the abolition of the tariff at the present time, or any practical way in which the demand could be acceded to without running the risk of national bankruptcy, the manufacturers would still be justified in opposing it. Before there is any attempt made to tinker with the present tariff, there should be a thorough and scientific enquiry, in which the subject should be studied from every angle. Tariff changes should be preceded by due and sufficient notice to all concerned, long enough in advance of their taking effect, in order that those affected may have due time to adjust their business to meet the new conditions. Stability is the first essential of successful manufacturing, and how can a business be regarded as stable that is subject to a 25 per cent. fluctuation in the market value of the commodities it produces by an over-night change in the tariff schedules?

The tariff should long ago have been taken out of the political arena. It is not too late to treat it as a scientific non-political problem. Before any serious changes are made in existing rates, the whole subject should be turned over to a neutral board or commission to determine what is best alike in the interests of the country, in the interests of the farmers and in the interests of the manufacturers. The Canadian farmer was never more prosperous than he is to-day. He, at any rate, is not suffering. If free trade is essential to his future prosperity, he, at least, can afford to await the outcome of a scientific enquiry into the facts. Sooner or later, when these facts are brought home to him, he will be convinced that in the last analysis his prosperity rests upon a prosperous and successful industrial Canada, and that manufacturing is no less essential to the country's well being than is agriculture.

Unemployment and Labor Unrest

Coupled intimately with the question of the tariff is that of labor. Never probably in the history of the Dominion were industrial conditions at as acute a stage as they are to-day. The rapidity with which men have been repatriated from military to civil life has made it impossible for industry, though trying its utmost, to absorb them. The high cost of food and other necessary commodities, due largely to world shortage therein, has aggravated the situation, until we are confronted with outbreaks such as that in Winnipeg.

From this distance and with the meagre information that comes to us, it is not altogether easy to judge of the situation in that city. Two or three things are quite apparent however. It is certain that the spirit that pervades the enforced shutting down of the industries and which has to some extent usurped the functions of government is not the British spirit as we have always understood it. It is not the Canadian spirit. It is not even the spirit of true trades-unionism. Rather, it is the spirit alien to democracies such as Great Britain and Canada. It is the spirit of the Russian Bolsheviki, and it has no place in this country. It should be driven out, root and branch. Its advocates, who are alike alien in spirit and in fact, and a menace to Canada, should find no shelter here. One of the most deplorable features of the Winnipeg situation is that some of the labor unions involved in the general strike have gone out in violation of agreements with their employers. They have treated these agreements as so many scraps of paper, and, to a large extent, they have undermined confidence in the good faith and integrity of trades-unionism in this country. That is one of the most unfortunate features of the Winnipeg strike, so far as I see it. Allowances, of course, must be made for those who are acting under duress. It is altogether probable that many of the strikers did not go out on their own volition. But when all allowances are made, trades-unionism will find to its regret that it has gained nothing by allowing the irresponsible element to lead it astray.

Any attempt to force a lower tariff at the present time must necessarily intensify unemployment and labor unrest. Industry cannot be carried on under uncertainties. Employment cannot be assured if the manufacturer is uncertain of his market or is left to the hazard of politics as to trade conditions which are to govern him.

Mutual Conciliation

The present labor situation can only be met by mutual conciliation and co-operation between Capital and Labor. Each must allow the other's right to exist. Reason must be re-established. In Great Britain, the Whitley Industrial Councils System is being employed to good advantage in bridging the industrial difficultits encountered during the trying days of post-war reconstruction. In the United States a somewhat similar system, inaugurated by the Rockefeller Institute, is being tried out with more or less success. Neither of these systems has, as yet, been tried out to a marked extent in Canada, so far as I am aware, although several projects, not unlike them, are now in force in some of the industries in this province and are, I am informed, having extremely beneficial results. Quebec, in fact, outs

of Montreal, we are happy in stating, has been less seriously affected by labor troubles this spring, than almost any of the other provinces.

In this connection it will be of interest to await the report of the Royal Commission on Industrial Relations now making an investigation of labor conditions in Canada on behalf of the Dominion Government. If it should appear from their enquiry that collective bargaining between groups of workmen, whether organized as trades-unions or otherwise, and between groups of employers is advisable, or that some other method is best applicable to the situation in Canada, there is no doubt in my mind that the manufacturers will loyally and willingly accept such a finding and do their utmost to give it effect. The measure of its success, however, in my opinion, will be based upon the extent to which it embraces the principle of co-operation between employer and employed, and the very essential condition as to how each party can be held to a faithful performance of obligations undertaken on its behalf.

Expansion and Prosperity

With Labor and Capital established on a proper understanding and mutually observant of each other's rights, there is no reason why Canadian industry should not at once enter upon a period of expansion and great prosperity. This country is already blessed, in greater degree than any other, with limitless raw materials of every sort and kind. One-half of the manufactured articles which we now import could just as readily be made in this country, thereby adding to our national wealth, giving employment to our surplus labor, and enabling us to increase our all-essential export trade. Take machinery, as a single instance. How many of our factories are equipped with foreign-made machinery which might easily have been made in Canada, if some one had the necessary initiative and enterprise. If I may be permitted to refer to my own business, I may say that we have recently placed orders to the value of over $100,000 with Canadian manufacturers for machinery formerly brought in from abroad, and I confidently believe these orders will result in building up a new industry to supply Canada with things which it was formerly believed could not economically be manufactured here, the belief being based altogether upon the fact that no one had ever tried the experiment. There are scores of similar opportunities only waiting development. If the war has taught us nothing else, it has at least taught us that the Dominion is a self-reliant country, capable of meeting any emergency, and able to produce anything required by its people. On a basis of population, Canada led the world in producing the munitions of war. There is no good reason why Canada should not be equally to the fore in producing the munitions of peace.

Public Ownership

Linked closely with our after-war problems and, perhaps, taking precedence of all of them, is that of our railways. Many citizens of the Dominion, who hold their country's welfare very much at heart, regard with feelings of the utmost misgivings the headlong plunge our Government seems to be making into the unknown and wholly experimental sea of public ownership and public control of the greater part of our transportation systems. Undeterred by the experience of the United States—an experience which, in the opinion of many sound thinkers in that country, threatens that wealthy nation with financial embarrassment and which has converted President Wilson to the policy of private ownership—undismayed by the almost equally unfortunate results of similar experiments in Great Britain and Europe, our Government seems bent upon forcing upon us a policy of public ownership irrespective of its results, and irrespective of the inappropriateness of the present time for experiments involving the outlay of hundreds of millions of dollars, when every dollar the country can exact from the people is needed to meet pressing war claims, such as those imposed by the demobilization of our troops, the payment of pensions and other expenses which cannot be avoided. Whatever merit there may be in nationalized railroads, Canada's experience has not been such as to bring them to light. Our past experiences in that respect have been costly and discouraging and not such as to induce further experimentation. It would have been better, in my opinion, had the Government awaited the outcome of the experiments now being carried out in the States, before embarking definitely upon so hazardous a project. Experience has proved two things beyond the shadow of a doubt—first, that public utilities cannot be operated as efficiently or as economically under Government ownership as they can under private ownership; second, that it is impossible to divorce political manipulation from publicly-owned utilities. These, to my mind, offer insuperable objections to public ownership, and it is with very great reluctance that I see the steps now being taken in Ottawa to fasten this unwelcome system irrevocably around the necks of the Canadian people. It would have been much better, in my opinion, for the Government before committing the country to this policy, to have at least sought a mandate from the electors for so doing, and thereby have given a chance for the sober common sense of the people to have asserted itself.

There are many other questions and problems which I should have liked to have touched upon did time permit, but some of these will come up for discussion in connection with our programme. I am glad of the opportunity of welcoming you to this our annual meeting of the Montreal branch of the Canadian Manufacturers Association and to express the hope that our gathering together may not be without beneficial results to all concerned.

ARE THEY OPPRESSED?

The number of automobile users in Western Canada continues to grow, states "Western Canada Week by Week." In Saskatchewan approximately forty thousand licenses have been issued already this year and applications are still being received. This number far surpasses the number issued during the same period of last year, and is partly due to the new settlers who are daily taking up land in the province, and to the fact that many farmers are now providing themselves with additional cars.

The Chicago Bridge & Iron Works have removed their general sales office from the works to the same space on the fifteenth floor of the Old Colony Building, Chicago, which they occupied previous to the war.

Maritime Branch Holds Annual at Halifax

Good Attendance of Members—Several Interesting Addresses Delivered—Angus McLean, Bathurst Lumber Co., Succeeds W. S. Fisher as Branch Chairman—A Number of Resolutions are Adopted

By H. R. THOMPSON
Secretary, Maritime Branch, C.M.A.

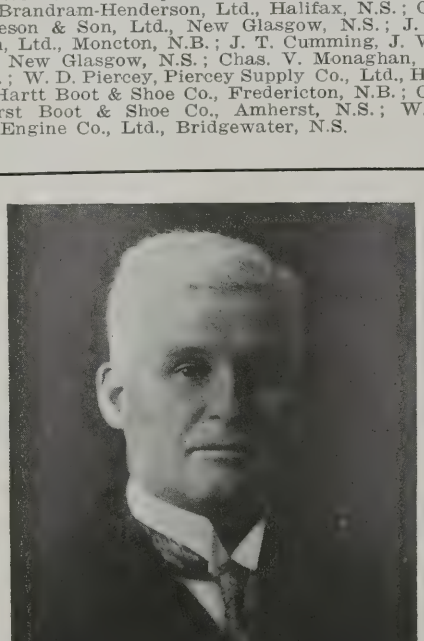
THE annual meeting of the Maritime Branch, C.M.A., was held at Halifax, on Wednesday, May 28th, in the Board of Trade rooms. About 60 delegates were in attendance and the sessions continued throughout the morning, afternoon and evening.

The reports of the officers and committees were received and illustrated the important work being carried on by the branch. In his report the chairman, Mr. W. S. Fisher, reviewed the activities during his term of office and also the general industrial conditions obtaining during the war and since the signing of the armistice. He also pointed out various problems which should be considered and dealt with toward the further development of the Maritime provinces.

The officers and committees which were appointed for the coming year are as follows:

Officers and Executive

Chairman—Angus McLean, Bathurst Lumber Co., Bathurst, N.B.
Vice-Chairmen—R. H. MacKay, Canada Tool and Specialty, Ltd., New Glasgow, N.S.; L. W. Simms, T. S. Simms & Co., St. John, N.B.; A. G. Robb, Robb Engineering Works, Ltd., Amherst, N.S.
Executive—S. E. Elkin, Maritime Nail Co., St. John, N.B.; Clifford McAvity, T. McAvity & Son, St. John, N.B.; C. D. Dennis, Canadian Car & Foundry Co., Amherst, N.S.; A. D. Ganong, Ganong Bros., St. Stephen, N.B; E. E. Shaw, Shaw & Mason, Ltd., Sydney, N.S.; J. L. Macdonald, Atlantic Underwear, Ltd., Moncton, N.B.; H. S. Crowell, New Burrell-Johnson Iron Co., Yarmouth, N.S.; A. R. McPherson, Windsor Foundry & Machine Co., Windsor, N.S.; Geo. W. Helliar, Brandram-Henderson, Ltd., Halifax, N.S.; C. M. Crockett, I. Matheson & Son, Ltd., New Glasgow, N.S.; J. A. Marven, J. A. Marven, Ltd., Moncton, N.B.; J. T. Cumming, J. W. Cumming & Son, Ltd., New Glasgow, N.S.; Chas. V. Monaghan, Moirs, Ltd., Halifax, N.S.; W. D. Piercey, Piercey Supply Co., Ltd., Halifax, N.S.; J. A. Reid, Hartt Boot & Shoe Co., Fredericton, N.B.; C. S. Sutherland, Amherst Boot & Shoe Co., Amherst, N.S.; W. T. Ritcey, Acadia Gas Engine Co., Ltd., Bridgewater, N.S.



Angus McLean
Bathurst Lumber Co., Bathurst, N.B.
Elected Chairman, 1919-20, Maritime Provinces Branch

Secretary—H. E. Thompson.
Ex-officio—W. S. Fisher, Emerson & Fisher, Ltd., St. John, N.B.; Archibald McColl, Nova Scotia Steel & Coal Co., New Glasgow, N.S.; F. Magee, F. Magee Limited, Port Elgin, N.B.; Alex. Wilson, Wilson Box Co., Ltd., St. John, N.B.

List of Committees

New Brunswick—J. A. Reid, Angus McLean, T. H. Estabrooks.
Nova Scotia Legislation—R. H. McKay, A. H. Whitman, A. G. Robb.
Promotion of Accident Prevention Association in New Brunswick—L. W. Simms, Angus McLean, G. C. McAvity.
Power Development—Angus McLean, J. A. Reid, A. A. Colter, W. D. Piercey, H. L. Fenerty, C. V. Monaghan.
Transportation—Angus McLean, H. R. Silver, A. H. Whitman, A. McColl, J. A. Marven, W. S. Fisher, L. W. Simms, A. D. Ganong, J. D. Palmer.

An illustrated lecture on "Accident Prevention" was given by G. H. Greenfield, Safety and Fire Prevention Engineer, of the Canadian Car & Foundry Co., and Canadian Steel Foundries, Montreal. The Strand Theatre was kindly put at our disposal for this address, which proved both interesting and educative.

The visiting delegates were entertained at luncheon at the Green Lantern Café by the Halifax members. Mr. H. R. Silver presided at this gathering, and, after welcoming the delegates to the city, emphasized the necessity for the development of export trade, and also for a careful study of the transportation problem, which is now the source of considerable worry to the Maritime manufacturers.

Following Mr. Silver, the Hon. O. T. Daniels, Attorney General of Nova Scotia, gave a very interesting address dealing with the situation in Nova Scotia as regards the development of water-powers. He pointed out that there were opportunities for greater economic power development than would be needed for years to come, and that the local Government was taking active steps toward the early development of these resources. He also stated that the Maritime manufacturers occupied a favorable geographical position for the development of export trade which is so necessary to offset the national debt. He further stated that it was up to the manufacturers, more than to any other class, to put the Maritime provinces on the map.

Following Mr. Daniels, Mayor Hawkins gave a short address of welcome and took the opportunity to point out the advantages in Halifax for the locating of other manufacturing concerns.

At the afternoon session the members were favored with a review of the workings of the N. S. & N. B. Compensation Acts, by F. W. Armstrong, vice-chairman of the N. S. Board and J. A. Sinclair, chairman of the N. B. Board. These addresses brought forth considerable discussion and cleared up a number of misundersandings.

The evening session was taken up with the discussion of Transportation Problems, Industrial Unrest, and the consideration and adoption of the following resolutions:

Maritime Union

Resolved, that this meeting of the Maritime Branch, C.M.A., re affirms the resolutions passed at the December meeting on th subject of Maritime Union, and suggests that the incoming Execu tive take early action along the lines at that time suggested.

; felt that the subject is of such importance that vigorous action hould be taken in the hope that some tangible results may be btained in the near future.

Transportation

Resolved, that the question of Transportation is of such extreme nportance that it is felt it cannot be properly dealt with at this eneral meeting and the subject is respectfully referred to the coming executive for special consideration, with the hope that ich early and definite action as may be deemed advisable will e taken on this most important problem.

Development of Power

Whereas, in previous resolutions adopted by the Maritime ranch, C.M.A., the desirabliity of developing the water powers of ie Maritime Provinces was brought to the attention of the Pro- ncial Governments, and,

Whereas, it is now possible to develop power cheaply from our ative coals, by erecting special power plants in close proximity to ie coal mines of these provinces; and,

Whereas, it is of the greatest advantage to develop every ossible economic soure of power in order that our manufacturing dustries can use these resources and be placed in as good a posi- on, respecting needed energy, as the manufacturers of the other rovinces:

Therefore, be it resolved, that at this meeting of the Maritime Branch, C.M.A., assembled at Halifax, this 28th day of May, 1919, we do memorialize our Provincial Governments to extend to every bona fide company which is prepared to proceed to develop these resources, every possible encouragement and assistance in order that the work can be commenced without delay and rushed to completion, and also to pass such legislation as may be necessary to enable them to proceed with such development and utilization, and we further recommend that such water power resources as are now held by individuals or corporations for speculative puposes should be secured by the Provinces and so handled that they may be used for the best welfare of the people.

Further, resolved, that copies of this resolution be sent to the Maritime Board of Trade and Government officials with the request that the proposal outlined receive their hearty and active support.

Fire Waste

Resolved, that this meeting of the Maritime Branch, C.M.A., notes with great satisfaction that the Government of Nova Scotia has, at this last session, enacted legislation establishing the office of fire marshal, from the establishment of which office much is expected in the decrease of fire losses with the consequent conservation of the wealth and resources of the Province.

In conformity with the resolution previously submitted, the hope is expressed that similar action will be taken by the legislatures of the Provinces of New Brunswick and Prince Edward Island at the next session.

Prairie Provinces Branch Reviews Its Year

Membership Now Stands at 526, a Gain of Ten for the Year—Much Effective Work Accomplished by the Legislation and Transportation Committees—Mr. E. Parnell Elected Chairman for 1919-1920

By G. E. CARPENTER
Secretary, Prairie Provinces Branch, C.M.A.

MEMBERS of the Prairie Provinces Branch turned out in good numbers on the evening of Thursday, May 8, r the annual dinner and business meeting of the branch. ie chair was occupied by the retiring chairman, Mr. N. W. arren, who, following the dinner, read his annual report viewing the work of the branch for the year. (The ldress will be found appended to this article). On otion of Mr. F. W. Drewry, seconded by Mr. Wm. Martin, e thanks of the members of the branch were extended to r. Warren for his services, and the secretary was directed have the address printed and distributed.

The report of the Transportation Committee was read by r. W. R. Ingram, chairman of the committee. It referred the success met with by the committee in securing the ncellation of an objectionable clause in the Interswitching rder of the Board of Railway Commissioners, which would ve required manufacturers to ship by the railway on which eir plants were located. Mention was also made of the riffs, filed by the railway companies, increasing the stop- er charges for milling or cleaning grain in transit from cent to 2 cents per 100 lbs. The committee succeeded in ving this tariff suspended. Another valuable piece of work as done in preventing the railways from increasing charges r local switching service until the basis for such charges r services performed in Eastern Canada was established.

Legislative Committee

In the absence of Mr. E. Parnell, chairman of the Legisla- e Committee, the report of this committee was read by e secretary. It dealt at length with the action taken by the anch on various measures introduced in the western Legis- ures, notably the Minimum Wage law for females in skatchewan, which is based on the Manitoba law and was dorsed by Saskatchewan employers; the Industrial Dis- tes Act in Manitoba, which received the support of the sociation, but did not meet with the approval of labor; the rkmen's Compensation Act amendments in Manitoba, etc. e committee endorsed the Bankruptcy Act as submitted by the Canadian Credit Men's Trust Association and now before the Dominion Parliament, and opposed the request of the Trades and Labor Council for the passage of an anti-injunction law.

The report of the Membership Committee was read by Mr. J. M. Thompson. It showed that applications had been received from 16 firms; six firms, which have gone out of business, resigned; and there was a net gain in membership of 10, making the total 526. The sections of the branch established in Western Canada showed increased activities and in some cases practically all the industries were identified with the section.

The report of the Nominating Committee was next read and the elections proceeded with, resulting in the unanimous election of the gentlemen proposed for the various offices and committees in the committee's report. These were as follows:

Chairman—E. Parnell.

Vice-Chairman—L. R. Barrett.

Executive Council—Messrs. J. O. Thorn, N. W. Warren, T. R. Deacon, J. E. Wildman, F. W. Drewry, Wm. Martin, M. F. Christie, W. G. Fraser, W. H. Fulton and A. B. Stoval.

Executive Committee—Messrs. J. Carruthers, D. J. Dyson, F. J. Baker, W. C. MacLaren, C. J. Brittain, W. A. MacKay, J. L. Crossen, L. J. Rumford, H. B. Lyall, J. Horn, H. M. Tucker, H. Echlin, of Winnipeg; and Messrs. Chas. Watson, Regina; H. G. Love, Moose Jaw; F. M. Beatty, Saskatoon; Chas. Pratt, Medicine Hat; Wm. Georgeson, Calgary; C. A. Graham, Edmonton, and George White, Brandon.

Transportation Committee—Messrs. W. R. Ingram (Chairman), J. Minnick, L. C. Stephens, J. Brittain, P. Shea, H. F. Anderson, W. J. Breen, A. E. Donavon, D. A. Clark, D. Dingle, E. G. Parker, H. A. Eager, J. S. Menzies, J. L. Costello, of Winnipeg, and A. Mihalko, Saskatoon; W. J. Harper, Moose Jaw, and P. M. Ames, Brandon; Wm. Innes, Calgary.

Membership Committee—Messrs. J. M. Thompson (Chairman), C. F. Roland, Jr., C. E. H. Harvey, P. G. Grout, W. A. Lawson, H. H. Clare, W. A. MacKay, A. L. Welton, B. G. Windrum, G. W. Murray, A. Davidson and W. T. Kennedy.

Insurance Committee—Messrs. H. B. Lyall (Chairman), C. W. Wardrope, J. Horn, W. Hood, D. N. Finnie, C. W. Veysey, J. S. Henderson, P. J. Smith, T. A. Harp, C. W. Furrow, H. L. Willson, Winnipeg, and T. Reynolds, Saskatoon; R. B. Hunter, Edmonton; J. P. Davies, Medicine Hat; Geo. Harrison, Moose Jaw; A. R. McDiarmid, Brandon; Wm Martin, Winnipeg.

The committee did not suggest nominations for a standing committee upon legislation, believing that, inasmuch as

matters coming under this heading have usually to be referred to the Executive for instructions, better progress would be made in handling legislation if left in the hands of the Executive to appoint special committees to deal with the various laws or proposed laws.

Mr. L. R. Barrett, the new vice-chairman now took the chair and thanked the members for the honor paid him in his election. A report was next presented by Mr. W. R. Ingram, chairman of the special committee appointed to draw up a report on industrial relations for submission to the Royal Commission. This was explained at some length by J. B. Hugg, K.C., solicitor of the branch, and a debate followed. Finally the report was referred back to the com mittee so that the views of the meeting on several point might be embodied in it.

A resolution was passed expressing the satisfaction fel by manufacturers in the completion of the aqueduct for th Shoal Lake water supply.

Major Anthes, Director of Soldiers' Civil Re-Establish ment and Ex-Chairman of the Toronto branch, was presen and addressed the meeting, explaining the work that th Department was endeavoring to carry out and bespeaking th co-operation of the manufacturers on behalf of the returne men.

Address of the Retiring Chairman

By N. W. WARREN
Chairman, 1918-19, Prairie Provinces Branch, C.M.A.

FOLLOWING the established custom, I ask you to bear with me for a few minutes while I review briefly some of the phases of the work of the Branch during the past year that I have had the honor of acting as your Chairman.

For over four years Canada has been laboring under the cloud of a world war which has no parallel in history. Shortly after its commencement, when the indications were that most of the people of this world would be embroiled in the controversy of might vs. right, grave concern was expressed as to the effect of such a war upon Canadian industry, and while you are all familiar with the grand response which it made and the large part which it played in enabling the Allies to stem the advance of the Hun, I want to refer briefly to the fact that while Western Canada was little known as an industrial community, it is a fact that the plants in this territory made an enviable record in turning out munitions, foodstuffs and other supplies for the Allied Governments. In fact, the initiative displayed by the management and the workmen in such plants was simply wonderful. Now that this dreadful war is over and it is expected that a treaty of peace will shortly be signed, steps must be taken to make the greatest possible use of the machinery that has been created during the war for even greater production upon a peace basis, if Canada is to pay the enormous debt she has incurred in doing her part in the fight for democracy, and she is to maintain the position in the world that her valiant sons have made for her upon the field of battle.

One hears a great deal upon the subject of reconstruction and in this field the manufacturers must play an important part.

Difficult to Make Plans

The sudden cessation of all war orders and work upon military supplies left many manufacturers who had devoted much, if not all, of their efforts in production of war supplies without a business almost overnight. It therefore behooves all such manufacturers to spare no effort to re-establish their businesses upon a peace basis and furnish employment to the greatest possible extent. It is unfortunate, however, that under these conditions there should be such a strong demand from the farming interests in Canada for a radical revision in the fiscal policy of the nation that it has made it extremely difficult for manufacturers to make changes in plans and embark upon new enterprises involving large sums of money, owing to the fact that they do not know what their position may be under possible action of Parliament at this session upon the tariff. This uncertainty, coupled with the ever-increasing demand of labor for higher and higher wages, with reduced working hours has made it impossible for manufacturers to consummat plans for greater production made when the armistice wa signed. I scarcely need point out to you, and yet I feel i my duty to do so, that unless work is furnished for larg numbers of artisans who desire employment in industries there will be a very serious condition of unemployment dur ing the coming winter. Therefore, I appeal to each one o you to spare no effort to avoid such a contingency.

The Labor Situation

As to the Labor situation, this is a very large matter an one upon which I shall make no prediction, but simply con fine my remarks to reviewing what has been done by th Branch, with the intention of showing you that no effor has been spared by it to meet labor in a reasonable manne but up to the present, unfortunately, any advance made b the Branch to organized labor has met with rebuff. Severa months ago the Executive appointed a special committee t investigate industrial relations. The committee obtaine pamphlets embracing the views of organized labor, employer and many economic writers, all over the world, upon th subject. About the time of the soldiers' riots this com mittee was about to make a report. When Mayor Gra appointed the Committee of Twenty for the purpose o clearing up the situation resulting from the soldiers' riot Mr. Parnell moved a resolution, seconded by a returne soldier, calling for the establishment of a commission upo which organized labor and employers would be equally repre sented, with a disinterested chairman appointed by the Gov ernment, to deal with industrial relations, with a view t lessening or overcoming interruptions in industry. Unfo tunately, after consulting the Trades and Labor Council, it representatives on the Committee of Twenty refused to hav anything to do with such a commission.

Following this the Premier, Hon. T. C. Norris, asked th Branch and the Trades and Labor Council to appoint repre sentatives to meet with a committee of the Government t discuss the matter of industrial relations, with a view t working out some plan for the adjustment of disputes with out interruption to industry. Your Committee attended thi conference and expressed a willingness to join in some a rangement with this end in view, but, unfortunately, th representatives of the Trades and Labor Council refused t have anything to do with such a plan, again stating tha they had their own means of enforcing their demands. No withstanding this, however, the Premier introduced a bill a the last session of the House providing for the establishmer of an "Industrial Tribunal" to investigate and report upo

ie hours and conditions of labor, rates of wages, cost of ving, etc. When this bill was before the Law Amendments ommittee the representatives of the Trades and Labor ouncil opposed it strongly, openly stating that capital had o rights and that they refused to deal in any manner with epresentatives of capital. However, the bill was passed and rought into force. The Premier called upon the Branch to ame five gentlemen, any two of whom might be appointed pon the tribunal, and this request was complied with. A milar request to the Trades and Labor Council bore no uit and up to date organized labor has refused to nom- ate any representatives to sit on the tribunal, nor, so far I can learn, has the Government succeeded in getting any epresentatives of the workers to accept an appointment. So at the Premier's efforts to bring about better conditions etween employees and employers have been blocked by or- anized labor.

The One Big Union

Subsequently, at a conference of the representatives of e various trades unions in Western Canada, held at Cal- ry in March, when a demand was made for a six-hour day, was decided to form what is known as the One Big Union, veral of the most radical representatives of organized bor having become dissatisfied at the action of their re- ective international trade unions in refusing to sanction rtain strikes and sympathetic strikes which local unions roughout the West desired to call without good cause.

The One Big Union plan would overcome this restraining fluence and its purpose was to unite organized labor in estern Canada into one solid mass for the dictation of orter hours and materially increased scales of wages. As ight be expected, such a radical step as this, involving paration from international unions which had afforded aterial relief in the past, has met with some opposition om the more level-headed element among the trades union- ts in Western Canada. In fact, at Edmonton the Presi- nt of the Trades and Labor Council has declared the seats the representatives of some locals on the Council vacant, der the constitution of the American Federation of Labor. Eastern Canada the One Big Union Movement appears to pretty generally disapproved of.

Appreciating the unrest that exists in the country, and rticularly in Western Canada and the Pacific Coast, the minion Government recently appointed a Royal Commis- on to investigate conditions and report upon some scheme r the improvement of relations between employees and ployers. This Royal Commission is holding sittings in estern Canada at the present time and will be in Winnipeg May 10th, 12th and 13th. A committee of the Branch has en busily engaged studying the situation and will to-night port to you what action should, in its opinion, be taken by is Branch when the Commission sits in Winnipeg. We e at the present moment in the midst of a very grave situ- ion and I know that you will give this report the serious nsideration that conditions warrant.

Anti-injunction Legislation

I cannot close my remarks with regard to the labor situa- n without referring to the demand made by the Winnipeg ades and Labor Council upon the Government of the ovince of Manitoba to pass what is commonly known as Anti-Injunction Legislation." That Council actually de- anded that the Province should enact legislation declaring at the action of any person or persons on behalf of a ades union should not be subject to restraint by the Courts the Province. This, notwithstanding the fact that in sev- al cases employers have been able to show sufficient un- lawful acts and threats to obtain injunctions from local courts restraining the parties making them and others con- nected therewith, from doing such unlawful acts. Naturally your Executive strenuously opposed the passage of this bill, and it was not enacted. However, while this bill was not passed, I am sorry to say that, notwithstanding our objec- tions, the Government included a clause in the Industrial Relations Act, providing that the Industrial Tribunal may declare effective what is equivalent to the Anti-Injunction Law referred to above. However, with the record of past cases available, and the fact that employers would be repre- sented on the Industrial Tribunals, it is not conceivable that this clause of the Act should be ever brought into force by the Tribunal.

After several years spent in the construction of an aqueduct from Shoal Lake, Winnipeg is now enjoying the benefits of a supply of splendid soft water. This will mean much to our members who have experienced difficulty from the deposits resulting from the use of hard water, and to others for which soft water is much preferable in their business. However, the Branch should make every effort to see that the soft water is sold upon a commercial basis and not, at the present time at least, upon a basis of making the present users pay upon the cost of the undertaking which has been constructed in such a manner that it will meet the requirements of a city of half a million of people, with at the present time about one-third of this number in the city who will use the water.

Compensation Rates

In January, 1919, the Casualty Insurance Companies writ- ing Workmen's Compensation Insurance in Manitoba applied to the Workmen's Compensation Board for an increase in rates, amounting to 83 per cent. The Board retained the services of an actuarial insurance expert to advise it. This gentleman supported most of the requests made by the in- surance companies. The Branch was represented at all hear- ings by its solicitor, Mr. J. B. Hugg, K.C., and its secretary, and contended that it had not been established that the insurance companies were entitled to increases applied for in compensation rates, but that their demands should be made by an effort on the part of the Board to restrict their awards to the amounts called for by the Act, to restricting administration expenses and by adopting a different scheme to estimate pension reserves.

How successful the Branch was I will leave you to judge when I tell you that the rates finally approved by the Work- men's Compensation Board provided for increases averaging less than 30 per cent., as against the 86 per cent. asked for by the insuring companies.

Transportation Matters

In common with ever-increasing costs, the past year has seen a further increase in transportation charges, in the shape of an additional 15 per cent. increase in freight and passenger rates. With the long distances that materials have to be transported to the Prairie Provinces and the fin- ished articles have to be hauled to consuming markets, a general increase in transportation charges is a matter of serious moment to Western manufacturers. However, hav- ing in view the fact that all the materials and labor the rail- ways purchased have greatly increased in price, and the only manner in which they could be reimbursed was by in- creased tolls, the Branch did not oppose this advance, on the condition that it would be treated as a war measure and without prejudice to an automatic revision to previous rates when conditions become normal. With the continued de- mand for increased wages from their employees, however,

it looks as though normal conditions might not be expected for some time to come, and that we shall have to conduct our businesses under the present transportation tolls for some little time.

Express Rate Increase

The express companies operating in Canada also applied to the Railway Commission for permission to increase their charges, stating that they had incurred loss in past years, and would require 25 per cent. additional revenue the coming year. However, the scale of rates proposed by the express companies did not provide for a general advance of all rates, but for an entire change in the method of assessing express charges, with the result that some rates were increased as great as 280 per cent. Many of the proposed rates bore unduly upon manufacturers and the Association raised very strong objection to the manner in which the express companies proposed to raise the additional revenue, contending that any advance authorized by the Railway Commission should apply equally to all traffic. No decision has yet been rendered.

I feel it my duty to make some reference to the operations of the Minimum Wage Board for Females in Manitoba. While some members may not have been in full agreement with every award made by the Board, I believe that, generally speaking, they are satisfied that our representatives upon the Board have carefully protected the interests of employers to the greatest possible extent, consistent with their duties under their oath of office. There is no doubt that the action taken by the Branch last year in securing the establishment of the Minimum Wage Board for Females, in opposition to the request of the Trades and Labor Council that a Statutory Minimum for all classes of female workers be placed in the Act, has been justified by subsequent developments, as had the Government adopted the other scheme we should have had demands for a very materially increased minimum to be placed upon the statute books at the last session.

Returned Soldiers: While I believe that it may be unnecessary, still I feel it my duty at this time to make an earnest plea to you for the sympathetic consideration of the re-establishment of returned soldiers in civil life. When you think of it, it is hardly to be expected that men who have been living in the manner they have been compelled to live for the protection of this country, should be able to in all cases revert to an entirely different mode of living upon short notice. No doubt you will run across cases which may be exasperating, but, on the other hand, you will no doubt also be glad to welcome back some of the very best men that you have ever employed. Time, it is said, is a great healer, and patience and sympathy in the handling of returned men will, I am sure, amply repay every one of you for its intelligent use.

The Returned Men

In February last the returned men became incensed at the lax manner in which our laws were administered whereby an element in the community was allowed to advocate the very things that the soldiers had been fighting for some years. Matters came to such a pass that radical socialists, who denounced every act of the Government, and in fact in some cases any government, were holding frequent meetings, preaching sedition, and the climax came when a public meeting was called by them on a Sunday afternoon on the market square. The returned soldiers, unable longer to restrain themselves, broke up an attempt to hold this meeting, and wrecked several foreign and socialistic clubs where it was stated that meetings had been held. Unfortunately, getting beyond the control of their leaders, they threatened and made demonstrations against factories in the city where aliens were employed, demanding that they should be discharged and that the Government should at once deport them. Your Executive at once got in touch with the soldiers' representatives, in an endeavor to reach an understanding of their desires, with a view to meeting them wherever possible. After this meeting, it published a full-page advertisement in all of the Winnipeg papers, stating that following their announced policy all Winnipeg manufacturers would welcome back to their old jobs all their employees who had left to join the colors. Further, that employment would be furnished to the greatest possible extent to other returned men, and that wherever an alien enemy was employed and a returned soldier qualified to do the work could be employed, this would be done, and the alien discharged. This was followed by the establishment of a Committee of Twenty by the Mayor, upon which the Branch was represented by five members, with such satisfactory results that there have been no more demonstrations of the character referred to and harmonious relations now exist.

Freight Charge Bonds

During the past year the Canadian Railway War Board has endeavored to inaugurate a practice which I believe is unnecessary, and which to a certain degree casts a reflection upon all business firms with which they have had dealings in the past. I refer to the demand that every firm, large and small, must furnish a bond for the payment of freight charges where credit is extended. This practice of extending credit has grown up for the purpose of facilitating the delivery of shipments and it has been recognized by the carriers that it was just as much in the interests of the railways as the shippers, if not more so. Possibly, owing to the lack of ordinary business judgment, credit may have been extended by the railways to some firms where the practice was not warranted, but the remedy for this was in their hands the same as it lies with any business concern, and that was to refuse an extension of the privilege. In place of doing this, however, the Canadian Railway War Board has demanded that all shippers must file a bond for the payment of freight charges, regardless of the fact that in many cases the railways themselves owe the shippers sums of money many times as great as such shippers owe the railways for freight charges. Under these circumstances the Branch strongly opposed the demand of the Railway War Board, and although certain concessions have been made by the latter from time to time, and the effective date of the Order postponed until June 1st, the Branch has consistently opposed the giving of bonds for the payment of freight charges where credit is extended, and I am pleased to be able to say to the meeting that the Association has been able to convince the Canadian Railway War Board of the justness of its representations, and induced the latter to withdraw the Order.

As the chairmen of the various standing committees will place before you in detail the many important subjects that have been dealt with by the Branch, it is not my purpose to weary you with any extended remarks, but simply to say in closing that I wish to thank the chairmen and members of the various committees for their hearty co-operation and assistance during my term of office. These gentlemen have devoted much of their time to further the interests of the Association in the Prairie Provinces, and I bespeak for them and their successors your loyal and hearty support.

British Columbia Branch Makes Progress

Reports Presented at the Annual Meeting on May 14 Show that Fifty-five New Members were Elected during the Year—Useful Work being done by the Various Committees—Mr. Wm. McNeill Re-elected to the Chairmanship

By HUGH DALTON
Secretary, British Columbia Branch

THE annual meeting of the British Columbia Branch, C.M.A., was held at Vancouver, on Wednesday, May 14. eports on the year's work were presented by the chairman, m. McNeill, Western Power Co. of Canada, Limited, and the cretary, and officers and representatives were elected for e ensuing year. Mr. McNeill was again appointed chairman, th Edwin Tomlin, British Columbia Cement Co., Limited, ctoria, vice-chairman. The Executive Committee consists the following:

J. W. F. Johnson, B. C. Sugar Refining Co., Ltd., Vanuver.
J. B. Thomson, Jas. Thomson & Sons, Ltd., Vancouver.
E. W. Hamber, B. C. Mills Timber & Trading Co., Vanuver.
H. J. Bigger, American Can Co., Vancouver.
J. H. McDonald, B.C. Manufacturing Co., Ltd., New Westnster.
W. H. Leckie, J. Leckie & Co., Vancouver.
J. R. Duncan, Vulcan Iron Works, Vancouver.
G. W. Wooster, Granby Consolidated Mining, Smelting & wer Co., Ltd., Vancouver.
W. H. Barker, B.C. Packers' Association, Ltd., Vancouver.
J. J. Plommer, Clayburn Company, Ltd., Clayburn.
J. J. Warren, Consolidated Mining & Smelting Co. of nada, Ltd., Trail.
J. O. Cameron, Cameron Lumber Co., Ltd., Victoria.
N. A. Yarrow, Yarrows, Limited, Victoria.
F. A. Quigley, Vancouver Knitting Co., Ltd., Vancouver.

The following were elected representatives of the branch the Executive Council of the General Association: Messrs. H. Leckie, John R. Duncan and J. W. F. Johnson.

Chairman's Report

The following report was presented by the Chairman, Mr. lliam McNeill:

"The first year of the work of the British Columbia anch has amply demonstrated the wisdom of the executive cers of the Canadian Manufacturers Association in open- up offices under the management of a salaried secretary, d an honorary executive committee. The Secretary's re- rt will show the progress made in membership, and the erest taken by the Executive Committee in all meetings at were called to discuss matters relative and important manufacturing industries in British Columbia. Whatever re the causes which led to the undoubted criticism of the nadian Manufacturers Association in its former existence this province, it is to be said that the work of the past ar has gone a considerable way to removing prejudices, ducing friction, and creating harmony between British lumbia and Eastern Canada. Undoubtedly there are, and l be diversities of opinion regarding many important mats, but diversity is not a synonym for division—and I only ress the wish of every member of the Executive Comttee in stating that this branch will be of value to the vince in continuing the policy which your Executive has tiated in the past year in trying to cement East and West o one great, prosperous Dominion of Canada.

"Western Canada has and must become increasingly imtant, and it is of prime importance to both East and West find and establish economic tariff and development ationships and undertakings that will promote harmony l induce prosperity throughout Canada.

"Your chairman has noticed a growing tendency on the t of eastern manufacturers to get better acquainted with the needs and demands of British Columbia—and this branch can have no higher aim than to conserve and safeguard the interests of the manufacturers of British Columbia, and to make known these interests throughout Canada.

"The Executive Committee was divided into the following sub-committees: Legislation, Transportation, Membership, Tariff, Reconstruction and Export—and among the subjects discussed and necessary action taken in the interest of members interested were:

Assimilation of returned soldiers into civil life.
Investigation of industrial conditions.
Labor problems.
Minimum wages for women.
Railway construction in British Columbia.
Reconstruction.
Tariff.
Insurance.
Greater Vancouver harbor development.
Greater Vancouver terminal railways project.
Technical education and vocational training.
Freight rates classification. Freight credits.
Steamship service between Canadian Atlantic and Pacific ports via Panama Canal.
Workmen's compensation.
Shipbuilding as affecting manufacturers of supplies made in British Columbia.

"In connection with the tariff, it may be of interest to note that negotiations have been opened with the British Columbia Lumbermen's Association with a view to securing if possible a preferential tariff agreement with Australia.

"The chairman learned while in Ottawa in March last, that it was the intention of the Government to introduce a bill at the present session of Parliament, dealing with Technical Education and Vocational Training, and for the purpose of assisting such education certain sums are to be paid by the Dominion of Canada to each province in proportion to its population. It is to be hoped that such legislation will become effective this session, and we are in communication with the Provincial Secretary regarding this matter.

"Your chairman visited the head office of the Canadian Manufacturers Association in Toronto twice during the year, and this branch had the pleasure of meeting two of the members of the Toronto branch.

"The secretary has been invited to attend the annual meeting of the association in Toronto in June, and it is gratifying to state that this branch will be represented at the annual meeting by three of its members.

"The thanks of the chairman are most heartily recorded for the enthusiasm and support of every member of the Executive Committee."

Secretary's Report

The secretary of the branch, Mr. Hugh Dalton, then presented his report on the year's activities:

"During the past year the Executive Committee of this branch held twelve meetings, with an average attendance of seven members on each occasion.

"The Legislation Committee held one meeting, the Transportation Committee three meetings, and the Membership Committee eight meetings.

"Various special meetings of different groups of manufacturers have also been held to discuss matters of particular interest to the industries represented.

"A special committee of your Executive also met, in the early part of this year, representatives of the Great War Veterans' Association and the Department of Soldiers' Civil Re-Establishment, to deal with the matter of replacing all

enemy aliens employed in this province with returned men. At this meeting action was taken which was agreeable to the representatives of the returned men, and this action on the part of the special committee was confirmed at a later meeting of the full Executive Committee.

"The membership of this branch of the Association has shown a steady growth during the last year. At the time of the last annual meeting the membership of the branch consisted of fifty-nine firms. During the past year fifty-five manufacturers, representing practically every class of industry in the province, have been added to the membership of the Association, so that the total membership at this date is one hundred and fourteen; and it is confidently expected that as the ability of the Association to be of substantial assistance to its members is demonstrated its membership will materially increase.

"The recent action of manufacturers in Victoria in deciding on the formation of a section of the Association with headquarters in that city, to be known as the Victoria and Vancouver Island Section, is a matter of particular satisfaction, indicating as it does the growing realization on the part of manufacturers in the province that the Canadian Manufacturers Association affords the best possible medium of co-operation among manufacturers in all parts of the Dominion. The Victoria and Vancouver Island section has now been organized under the able chairmanship of Mr. Edwin Tomlin, who has been vice-chairman of the British Columbia branch during the past year.

"During the year the secretary has made a number of visits to different sections of the province, for the purpose of keeping in touch with members, and bringing in new members so that this branch of the Association may be truly representative of all industries in all parts of the province.

"Through the Association's connections abroad, this office has received visits from a large number of business men from China, Japan, Australia, New Zealand and other parts of the world, all of whom were prospective purchasers of products of Canadian industries, and through the assistance given to these visitors, connections have been formed which it is hoped will be of direct benefit to members. This branch has also been able to be of some assistance to visitors who were considering the establishment of factories in this province.

"Your Executive Committee has felt that the Secretary's principal efforts for this first year of the reorganization of the British Columbia branch of the Association should be directed toward building up the membership, and in carrying out this policy the secretary gratefully acknowledges the hearty co-operation of the Executive Commitee and other members of the Association in this province. This office has also endeavored to render assistance to various members on tariff, transportation, insurance, legislation and other matters of particular interest to individual members, and the undersigned is very strongly of the opinion that the knowledge gained in the past year will tend to better efficiency and greater progress in all matters pertaining to the welfare of members.

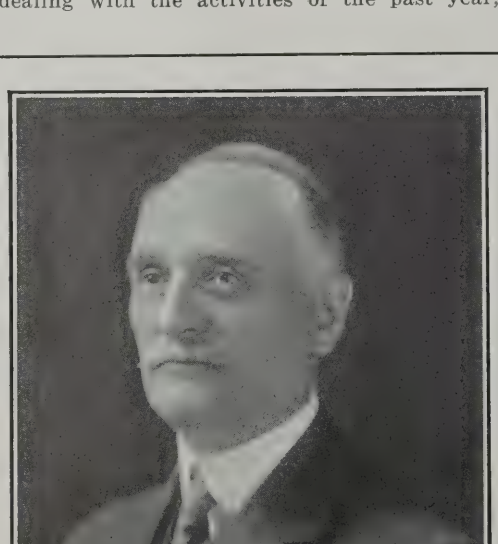
"Let every member bear in mind that the only reason for the existence of the branch is the use and benefit it can be to its members."

Hamilton Branch's Annual Meeting

By H. E. WATERMAN
Secretary, Hamilton Branch, C.M.A.

OWING to extremely inclement weather, the annual meeting of the Hamilton branch, on the evening of May 16, was very poorly attended, and the address which was to have been presented by Mr. F. H. Whitton, general manager of the Steel Co. of Canada, was postponed.

Mr. H. H. Champ, retiring chairman, presented a splendid report, dealing with the activities of the past year, which covered not only the closing period of the war, but also many complex conditions arising out of the cessation of hostilities.



Geo. H. Douglas
Thornton & Douglas, Limited, Hamilton
Elected Chairman, 1919-20, Hamilton Branch

Mr. Geo. H. Douglas, the newly-elected chairman, addressed the members and spoke optimistically of the future, expressing his intention of bringing the general membership more often together. This, he explained, had been difficult during the period of the war, not only in Hamilton, but elsewhere, but he felt that it would be possible now to arrange for successful and well-attended general meetings, which he felt would bring the membership more closely together and work out for the general good.

The officers and committees for 1919-20 elected at the meeting, were as follows:

Officers—George H. Douglas, Chairman; F. A. Merrick, Vice Chairman; H. E. Waterman, Secretary-Treasurer.

Executive Committee—Henry Bertram, J. A. McMahon, Cyrus A. Birge, A. F. Hatch, W. B. Champ, H. P. Hubbard, R. Hobson, A. L. Page, Geo. C. Coppley, W. R. Dunn, C. W. Sherman, F. R. Close.

Ex-officio Members—R. R. Moodie, H. J. Waddie, H. H. Champ, W. H. Marsh.

Finance—George C. Coppley (Chairman), N. Slater, W. Skelton, C. W. Sherman, K. Bethune, Cyrus A. Birge.

Membership—J. A. McMahon (Chairman), G. W. Robinson, A. F. Zimmerman, W. E. Blandford, C. A. Murton, K. Bethune, G. E. Main, A. T. Enlow.

Municipal and Legislation—A. L. Page (Chairman), A. Young, J. W. Millard, D. B. Wood, Geo. A. Simpson, A. C. Garden.

Reception and Entertainment—H. P. Hubbard (Chairman), A. H. Tallman, O. W. Cook, H. G. Wright, P. M. Yeates, James Wagstaffe, F. M. Hatch, C. A. Murton.

Technical Education—F. R. Close (Chairman), H. J. Waddie, C. R. McCulloch, R. C. Fearman, J. A. McMahon, R. A. Robertson, P. Ford-Smith.

Transportation—W. R. Dunn (Chairman), F. H. Whitton, W. Drynan, A. F. Hatch, C. A. Hunter, A. T. Enlow, Henry Bertram, F. W. Dean.

Nominated for Executive Council of Association—H. H. Champ, A. F. Hatch, H. J. Waddie, Geo. C. Coppley, W. H. Marsh.

Legislation—H. J. Waddie, A. L. Page, Geo. C. Coppley.

Insurance—J. W. Millard

Transportation—W. R. Dunn, A. F. Hatch.

Tariff—H. H. Champ.

Membership and Reception—H. P. Hubbard, K. Bethune, J. McMahon.

Some Observations on Present-Day Unrest

Extremists and Well-meaning Theorists Would Overturn Present Civilization—Sane Workers Should be Met in Spirit of Brotherhood and True Democracy—Profits of Industry Greatly Exaggerated—The Distribution of Wealth

By S. R. PARSONS

Past President, Canadian Manufacturers Association

HE would be a bold man who would hazard even a complete analysis of the present social and industrial ituation of unrest, let alone prescribing an adequate remedy. 'here are some things, however, that are fairly clear and ight be stated as follows:

1. There are extremists in the ranks of our industrial orkers whose ambition is to overturn all our present vilization and ordered democratic government. They are iterested simply in smashing up by revolutionary methods iat which is stable and which, although faulty perhaps here nd there, is the product of the best thought and effort of all ie past. In the effort to obtain the fruit such extremists ould cut down the trees and very soon nothing but chaos nd disorder would prevail. For such revolutionaries no etterments will suffice. It is difficult at the moment to see here they will land. The overturning of society and govern-ent, as at present constituted, and the smash-up of our in-ustrial and social life would not bring better conditions to ich people. Russia is surely an object lesson to-day to all ie world, and sane labor leaders, like Mr. Gompers, have een the most outspoken in denouncing the evils of Bolshev-m, that twin brother of autocracy. Those who have been llowing the representations of the United States ambas-ador to Russia and members of his staff, as well as others, efore the Senate Committee of that country know that these nbiased witnesses have stated in effect that fully three-uarters of all the industries of Russia are closed down to-ay on account of lack of capital to buy raw materials, etc., nd, further, that in the small number of industries that are perating the actual wages paid are in many cases less than ey were before the revolution. Similar statements have ap-eared in an official British Government paper. It is, there-re, a question for the State to consider as to how to deal ith such elements in our population.

Well-Meaning Theorists

2. It should be pointed out that fuel has been added to the volutionary fires to be found in our Dominion by a few ell-meaning theorists in Church and State, as well as in r college halls. These men are like doctors without a prac-ce. A few years of everyday practical experience would ange many of their fine spun doctrines. There are also ssibly here and there extremists among employers, who e living in a past age and do not realize that new condi-ons have sprung up all about them which call for different eatment.

3. Then we have the great sane body of workers who, when obably and intelligently led, desire only that which is right d fair, and these must be met in a spirit of brotherhood d true democracy on the part of employers, who should not dy be ready to consider just claims, but whose first business ought to be to exhibit a real interest in the conditions of ose by whom they are surrounded. This, I take it, is the great task before us in Canada to-day. There are, no doubt, many inequalities to be removed, but singing the hymn of hate will never dispel them. *Goodwill is a first consideration.* The management of every industry must realize that unless the conditions of work for all concerned are satisfactory there can be no proper progress. One difficulty in the past seems to have been that there was not enough confidence shown to the workers. Adverse conditions often prevail in business that the workers and outsiders are entirely ignorant of. I believe that there ought to be frequent conferences between all parties interested in any one industry and more frankness displayed on both sides.

Profits Exaggerated

4. The profits of industry have been greatly exaggerated in the minds of many of the workers and they have been led here and there to believe that industries were always both greedy and prosperous. As a matter of fact one of our great writers on industrial problems in England has figured out that over a period of one hundred years the profits of industry, considering the good and the bad times, the capital that has been lost as well as that which has made good, have not been over five per cent. In Canada probably the same comparison would hold good by the addition of the higher values of money which pertain to a new country. Here and there have been notable exceptions, where industries, on account of an enormous turnover or some other fortuitous circumstances, have made extra large returns. Conditions such as here stated make difficult the application of any one system of general betterment as applying to all industry.

5. It is admitted that wealth is unevenly distributed, but probably not to the extent that many of our public speakers have stated. The *New York Times* is authority for the recent statement that seven-eighths of all the incomes of the United States belong to those having an income of $5,000 each per year and less. In Canada there would be a still more even distribution. If the surplus in the hands of the comparatively few were distributed to-morrow it surely would soon be dissipated. It must be remembered that wealth, honestly made and stored up here and there out of profits over and above the labor and other expenses of the day, is available for national purposes and becomes the backbone of our national financial system. The recent experiences through which we have passed in the raising of our Victory loans have surely convinced us that the savings of the people, large and small, alone prevented us from bankruptcy. I am not arguing for men here and there to find an easy method of accumulating large wealth, but where men have been fortunate through special ability or the thrift and savings of the years, it appears to me that the income tax will do what is necessary to relieve them and annex to the purposes of the State a fair share of what they have from time to time.

6. Despite the childish nonsense of some of our extremists and theorists, the only way for Canada to pay her debts and

* Statement presented before the Royal Industrial Commission at its nt hearing in Toronto.

succeed nationally is to produce in field, factory, forest, mine, etc., all that is possible and sell such products at a profit; otherwise national bankruptcy is not far ahead. As with the nation, so with the individual. Spurred on by competition in all the realms of our activities we must do our work with a view to making a margin of profit, otherwise individual bankruptcy stares us in the face. Temporarily employers, on account of inevitable war conditions, enhanced costs of labor, raw materials, etc., may have to do business without profit, but, if so, nothing is surer than that the nation and the people generally will suffer to that extent. Without profits and the stimulus of competition in all our endeavors we would, after passing through the fires of destructive socialism, finally emerge as a race of chattering baboons and drivelling idiots.

Destruction of Individuality

7. It should not be overlooked that if we attempt to destroy individuality in our social and industrial life and bring all men to a dead level we simply destroy human liberty, which must be preserved at all costs. A great lawyer in the United States has put the case well in the following words:

"No two men are equal in ability and character, and if you undertake to make them so then you undertake to make the vicious equal to the virtuous; you undertake to make the extravagant equal to the frugal; you undertake to make the man of character equal to the man who possesses no character; you undertake to make the man who denies himself for those dependent upon him the equal of the man who denies himself not at all and who undertakes to claim that the failure of his life is due to forces outside of himself. So that in the disposition of Almighty God you are interfering with the plan of divine providence every time that through the machinery of the state and in the name of liberty you undertake to create an equality between those who are naturally unequal. But what we have got to undertake is to reconcile individual liberty with social progress. This does not mean that we are going to have less of the stimulation of individual effort, but that we are going to have more of the delivery of the effort of the individual for the benefit and in the service of his fellows.

"We are told we are going to have a social democracy. Very well, but I hope we will determine first what we mean by it. If by social democracy you mean a democracy in which those who work with their hands are to direct those who possess the technical knowledge, the executive ability, and the administrative skill, to guide the highly complex industry of our time, if you mean to say that is the social democracy, then you are simply creating the means of self-destruction. You might as well permit the child to raise his father. You might as well declare that ignorance shall be the master of knowledge, and that skill shall yield itself to the leadership of the unskilful, and that the banker shall turn over his institution to the guidance of the accomplished plumber. I hope we are going to have a social democracy in the sense that we shall have a greater participation in all the efforts of our highly complex system of production shared by all who do the work of production."

8. What then? Let us get down to bed-rock principles. If the welfare of society, of families, and of individuals be the aim, let us seek it directly by considering society as a whole. Human beings need more than comfort, respectability, economic security, and amusement. They need fellowship and association; they need to realize their inter-dependence. We must think of all classes together and not of one class only. If good-will be the basic principle—and this cannot be brought about by legislation and conference—surely the rich would do well not to be ostentatious in their displays and vulgar in their spendings. They should have a real and positive and direct interest in those who have not been so fortunate. Those who are not so well-off should by practising thrift and economy and the exercise of self-denial do everything possible to get a little ahead. I do not speak without personal experience in this matter. We would all probably agree that we are culpable in that we are altogether too extravagant in matters of dress, of houses and furnishings, of amusements, and sometimes in the matter of food. We might possibly carry this view into our public ostentation—government display, fine buildings, magnificent streets, etc., etc.—all, of course, serving many good purposes but adding to our burdens.

9. In the matter of hours of work, my own conviction is that eight or nine hours a day should be considered ample. Where the work is very hard and wearing, probably eight hours is as much as should be expected. Men ought to have a reasonable time for rest and recreation. If they do not use their leisure hours properly it is the fault of our civilization and opens a wide door of opportunity for all organizations that are formed to serve mankind. It is difficult, however, to lay down an absolute law applicable to all industries because of the fact that conditions of work in some are light while in others they are very heavy; also because of the fact that our industries have to compete with industries in contiguous and other countries, and, further, that all industries have not equal ability in dealing with this particular matter. Different conditions governing hours of work obtain in different provinces, making fair competition extremely difficult. This is also true of our international relations. We have to compete with some countries where hours of labor are very long and wages insignificant. If there could be brought about national and international agreements as to hours of work in different industries and possibly some form of protection to our better paid workmen against products made in countries where labor costs were comparatively almost negligible, this might help matters. It can readily be seen, however, that it would afford us no help in our export business. The problem is not easy of solution. I have sometimes thought, while appreciating the good that unions have done in various directions, that if they could be made a little more elastic so that capable, ambitious, thrifty, hard working men would be clearly recognized and be able to do better for themselves than others of different habits they would be still more helpful to their members. Possibly part of the unrest is often the result of ambition being dwarfed in go-ahead, capable men by the dead level of unionism which exists to a certain extent, but I am glad to know not as largely as heretofore, particularly in England. It must be remembered that oftentimes the real toiler is the woman in the home with a large family to bring up. If shorter hours for the man would mean more association, support and help in homes and family life it certainly would be a boon.

The Question of Wages

10. The question of wages is a most difficult one, particularly at the present time. Employers are on a war-time basis of general costs, wages, and values of raw materials and so far as the seemingly high wages are concerned these must be maintained as long at all events as the high cost of living continues. The business that is being done, however, is on a peace basis, which means in most cases heavy reductions of both volume and profit. While on the one hand manufacturers, generally speaking, are not thinking of profits just now, but rather of keeping their organizations going and their people employed, yet it is difficult on account of conditions mentioned to meet the views of many of the employees. On the other hand it is quite clear that the enormous costs of food products, particularly, which must be paid for with such a large proportion of wages, are so high that greatly increased wages are not sufficient to cover the

extra expenditure in many cases. Those who have wages or salaries larger than a low average do not need to spend such a large proportion of them in the actual necessaries of life and, therefore, do not find it so hard to get along. We ought to face this problem very honestly and sincerely and address ourselves to the task of making sure that the costs of living are fair and reasonable at the present time. No doubt when another harvest has been reaped, with the greater production coming into the markets, it will help matters. One of the strange anomalies of the present situation is that the farmers are trying out everywhere for help so that they may increase production, which would be in the interests of all classes, and yet at the same time there are thousands of idle men in our cities who refuse to go out and work upon the farms, even temporarily. This is certainly an uneconomic condition, and it would be doing such idle men no injustice to say to them, "If a man will not work, neither shall he eat." It may be that we in Canada, as well as other nations of the world, have moved up permanently on a higher level so far as all our values of things are concerned, and that we have failed to recognize this. If so, there must be an adjustment which will not only mean higher money wages, but higher salaries, higher incomes, and higher returns in all our social and financial life and undertakings.

11. I am strongly in favor of co-operative working in our industrial life. While it may be difficult to find any one system that is applicable to all industries, yet, if we get into the spirit if such working we will adapt our plans and schemes to the particular industry involved. Failure here and there should not condemn such co-operation. It is quite natural that until we have tried out for a reasonable length of time plans of co-operation we will meet with dissatisfaction now and again. *If these fail, what have we to put in place of them?* This is a question that is serious enough to concern alike employers and employed and I cannot emphasize it too strongly. I find, however, that while in individual industries there is a pretty general feeling of satisfaction among the workers where such plans of co-operation are being tried out, there is at the same time some peculiar force at work outside which seems to destroy the spirit that characterizes relationships within. This is a matter for us to study together. While we are more or less excited and on edge owing largely to our experience of the past four or five years, as well as the destructive tendencies which are abroad, I am persuaded that with patience and an exercise of a spirit of humanity, good-will, frankness, and consideration for each other's interests and rights, we will gradually reach a condition where the pendulum will swing evenly and life take on a happier hue. Co-operation is the key-note. Many do not realize that labor is not the sole creator of wealth; in fact, it has been well stated, "The smaller the amount of labor, i.e., physical effort employed, in relation to the tasks accomplished, the greater the wealth produced." Labor to an almost unlimited extent can be had in Siberia and some other countries, but the laborers are almost starving. *Capital, directing ability, invention, and labor, when all properly combined and related, yield the best returns, which should be open to a fair division.*

Montreal Manufacturers Present Their Views*

By W. P. HUGHES
Secretary, Montreal Branch, C.M.A.

MANUFACTURERS in the District of Montreal have gone into the subject of Industrial Relations very thoroughly. Group meetings were held in the Canadian Manufacturers Association branch offices, when manufacturers of all kindred lines were brought together to formulate their views on this all important topic of discussion.

Committees were chosen from each group, which met in a joint meeting, and the following document was drawn up and presented to the Royal Commission on Industrial Relations, in the City Hall, on Friday, May 30th:

Mr. Chairman and Members of the Royal Commission on Industrial Relations:

GENTLEMEN,—

We are glad of this opportunity of appearing before you to present the views of a very large number of manufacturers representing many lines of industry in the district of Montreal. Group meetings have been held when industrial conditions obtaining in this district were discussed. Representatives from each group were appointed to a joint committee from which joint committee we were elected to come here this afternoon.

We appreciate the importance of the work which you have undertaken, and we congratulate you upon the energy with which you are carrying it forward.

As manufacturers, we believe no greater problem than the one which is your concern at the present moment, faces Canada to-day, and what we have to say is born out of the most serious consideration of these problems.

We are of the opinion that the relations between employer and employee should be based fundamentally upon confidence, co-operation and justice. We must provide a proper relation between employer and employee by creating a new set of conditions. This should be brought about by a plain, common-sense, man-to-man attitude of the employer to employee and *vice versa*.

Wages should be based upon productive power, efficiency and service rendered.

No outside influence should be allowed to come in to disturb the co-operative desires or arrangements between employers and employees in any industry.

The working conditions should be such as will stimulate employees to take a personal interest in their work, and eliminate any ill will which might prevail amongst employees.

We recognize that employers and employees have a mutual interest in each other. Therefore, everything possible should be done to bring about a greater realization of this principle, and any plans adopted should have this for their objective.

The employer should be interested in the general welfare of his employees, and the relation between them should be such as to create a better understanding of their respective problems, so that the problems of each would be fully appreciated by the other.

It is desirable to develop the partnership idea, so that production costs may be reduced to a minimum, thereby creating conditions which will tend towards reducing the cost of living.

Satisfactory economic conditions depend largely upon production, therefore there should be an understanding between employer and employee that production should be maintained upon a high, not a low, standard. This would work to the advantage of the employee, as well as the employer.

The hours of work should be determined by the conditions peculiar to individual industries so that no particular industry will be discriminated against.

With these underlying principles in mind, we beg to make the following recommendations:

1st. That any scheme of industrial councils, in so far as it depends upon a highly organized condition of employers and employees is inapplicable to many industries in Canada at the present time, for the reason that Canadian manufacturing is decentralized and the conditions surrounding manufacturing in the various provinces are highly diverse. There are,

* Memorandum on Industrial Relations prepared after conference of manufacturers of the district and laid before the Royal Commission on Industrial Relations at its hearing in Montreal on Friday, May 30th.

however, several schemes at present in operation in Great Britain and the United States which have meritorious features that should in time be applied to industry in Canada.

2nd. Realizing the great and immediate necessity for bettering relations between employers and employees, we would respectfully suggest that the Commission recommend to the Government:

(*a*) That every employer in Canada establish a system within his own plant whereby the relations between himself and his employees may be made the subject of friendly and intimate discussion;

(*b*) That in order to provide a remedy where such discussion does not lead to any satisfactory agreement, permanent district courts of appeal be formed, to which any employee or group of employees, or any employer or group of employers, may carry such discussion without prejudice one to the other, and with the understanding that the decision of this district court shall be final and binding upon both parties concerned. It is suggested that these district courts might well be composed of two representatives of employees, two representatives of employers and one judge of the Superior Court of the district. It is further suggested that the territorial jurisdiction of these district courts should be determined in accord with areas in which similar industrial and living conditions prevail;

(*c*) That a national industrial board be established, whose functions shall be advisory to the district courts in matters of national interest, especially as they apply to the export trade of Canada.

3rd. That inasmuch as the above suggestions would provide adequate and just methods for settling all industrial disputes and inasmuch as lockouts and strikes are detrimental to the community at large, legislation should be enacted to make these illegal.

4th. In order that industrial conditions affecting the relations between employers and employees shall be systematically reviewed, we recommend that the Government shall submit to individual manufacturers, at regular intervals, questionaires which, when filed, will provide the data necessary for making regular surveys of industry. In so far as this survey applies to the employer, the same shall be responsible for the supply and accuracy of information asked for. Where it applies to labor, and where such is organized, it shall be addressed to such organized body, and the same shall be responsible for the supply and accuracy of information. Where it applies to labor and no organization exists, it shall be addressed to the employer and he shall be the guarantor of the supply and accuracy of the information. To make this recommendation effective, it is submitted that all labor organizations should be incorporated.

5th. If the terms of reference to your Commission permit the consideration of this matter, we wish to say that we are unalterably opposed to strikes among federal, provincial or civic employees, especially among those engaged in the protection of life, health and property. We are of this conviction for the reason that any general cessation of work by this class of employees creates a condition in which the community is left without protection from the gravest possible dangers, which we submit is altogether intolerable. At the same time, we fully appreciate that every facility should be given such employees to state and obtain redress for their grievances.

Labor's Shield Against Bolshevism

By SAMUEL GOMPERS
President, American Federation of Labor

THE affairs of the whole world are in the process of remaking. Relations between nation and nation, and between the peoples within the various nations, and among working people particularly, are undergoing a new change and a new life.

I stand in so far as I can and dare—and I dare much—for the principles of natural and rational development and growth.

I am opposed, as is organized labor of America, to any destructive policy.

There is nothing that is worth while maintaining that I would aid or abet in destroying.

Our policy, our work, our method, our ideas and our ideals are to build, to construct, to grow, to help in the development of the highest and best in the human family; to make to-day a better day than yesterday, to make to-morrow's better day than to-day, to make to-morrow and to-morrow's to-morrow each a better day than the one that has gone before. That evolutionary process of progress and improvement is the basis for the opportunity for freedom, justice and democracy.

That is the constructive policy of progress. If that policy of the American labor movement is opposed, and successfully opposed, then our work, our activities, and our movement will be sent to destruction.

If we are impotent, if we are incapable of securing for the workers improvements in their conditions, then we ought not to exist. I say for myself that if I were convinced that the American labor movement is impotent to be of service to my fellows, I would quit it and abandon the organization to its justifiable fate.

It is a question of dealing with such a movement as represented by the American trade unions—the American Federation of Labor—or dealing with a body of irresponsible or irreconcilables. If we are not on the right track, then those who represent the wildest orgy of destruction, with no consideration for the rights of individuals, will come to the front. It is a matter of choice between dealing with such elements or dealing with the constructive forces of the organized labor movement of our country.

I do not know that I am entitled to very great credit because I am not a Bolshevik. With my understanding of American institutions and American opportunities, I repeat that the man who would not be a patriot in defence of the institutions of our country would be undeserving the privilege of living in this country.

It is true that we have discussed democracy. We have used that term glibly and often without understanding. It is true that we have discussed freedom, and often without understanding. I have had the opportunity to travel in Germany. I have never heard any people so vociferously and enthusiastically sing and shout the terms of freedom and democracy as did the German people.

Freedom is not a condition, nor is democracy a condition. Freedom is the exercise, the functioning of freedom, the practise of freedom, the practise of democracy. All that society can give, all that government can give, is the opportunity of freedom. It depends upon the people to be intelligent and grow into the feeling, the exercise and practise of the function of freedom. It was because the principles of freedom and democracy were menaced by the system of autocracy and militarism that the people of our country and the peoples of other countries and of the democracies of the world rallied around their banners and declared, and made good their willingness to make the supreme sacrifice, for the principles, the institutions and the practise of freedom which were threatened to be overwhelmed and crushed.

If I thought that Bolshevism was the right road to go, that it meant freedom, justice and the principles of humane society and living conditions, I would join the Bolshevik. It is because I know that the whole scheme leads to nowhere, that it is destructive in its efforts and in its every activity, that it compels reaction and brings about a situation worse than the one it has undertaken to displace, that I oppose and fight it.

Some Notes on the Purchasing Agent's Job*

The Selection of Materials a Man-Sized Job—How to Keep Stock at Lowest Point Consistent with Production—The Problem of Deliveries—A Good Slogan for Purchasing Agents

By JOHN L. THORNE

Of Thorne, Mulholland, Howson and McPherson, Industrial Advisors, Toronto

MUCH has been said and written in regard to the factory superintendent's and the sales manager's responsibilities during the period of reconstruction, but the purchasing agent, who is expected to furnish the right materials, in the right quantities, at the right time and at the right price, has also a very important part to play.

The selection of materials for the factory is an exacting duty at any time, but during these times of unsettled markets and changing sources of supply, it is, to put it mildly, a "man-sized job." When the war ended, it was generally expected, for some unknown reason, that we could place our orders in the usual quantities and stop worrying over deliveries and substitutions, but fate did not think our hair was sufficiently grey, and decided to keep us guessing.

Where is the purchasing agent who has not heard the factory superintendent's warm comment upon certain material because it could not be as easily worked as the previous order? Or if he is in the wholesale business, how many times have his ears burned under the scathing criticism of the sales manager, because a shipment was not up to sample? These are unpleasant recollections and they are not brought forward to depress but rather to show the difficulties under which the purchasing agent is working, and more important, how to overcome them.

In the first place, as a measure of self-defence, it is absolutely necessary for the purchasing agent to secure the factory superintendent's consent to substitute, however slight it may be. An instance of this occurred a short while ago. The purchasing agent of a firm who used large quantities of paper excelsior for packing purposes could not secure exactly the same grade as he had been accustomed to buying and innocently consented to a substitution, which was highly recommended by the supply house. Within a week after the shipment was received the packing department's production had dropped off so seriously that the factory superintendent conducted a personal investigation, with the result that the excelsior was condemned as it was found that being coarser, it was twice as hard to use, and in addition was scratching the girls' hands severely.

There is also unfortunately, another class of substitution. Allowing that the order is properly specified by the purchasing agent, it is necessary to see that the goods received come up to the specifications. It is not uncommon, especially during the last four years, for mistakes to be made in filling purchase orders, and it is the purchasing agent's duty to see that such mistakes do not occur. In some plants, it is left to the foreman to report unsatisfactory material, but as the goods may be in the possession of the company some time before this is discoverd, the invoice may be paid, or the time limit on a possible claim expired; in which case, it is difficult, if not impossible, to secure redress.

The best practice in modern purchasing departments, provides for an inspector of all goods received. Instead of the receiver forwarding all the material to the storekeeper immediately, several units, that is, barrels, cases, etc., are placed aside and sampled by the head of the department which is going to use it. It will be seen at once what a valuable protection this system of inspection affords the purchasing agent. Once the receiving slip is initialled by the inspector, the responsibility of the purchasing agent ceases. On the other hand, if the inspector refuses to approve of the shipment, a full report on the cause of his rejection is given which enables the purchasing agent to make a claim on the shipper quickly and intelligently.

All our troubles are not over, however, when the goods are right. It is essential to keep a sufficient supply on hand to keep pace with production and sales. The purchasing agents of the old school used to buy in large quantities to get close prices and trust to the storekeeper notifying them when the supply ran low, but the purchasing agents of to-day could not possibly survive such free and easy methods. In the first place, material is not as plentiful as it was, and even if it were, the problem of turnover has received such close attention that unduly large stocks cannot be countenanced.

It is not hard to see that a purchasing agent who, with an average stock of $100,000, enables a company to do $500,000 of business annually, is worth considerably more than a purchasing agent who has to keep a $200,000 stock to sell the same amount as the other. Every extra dollar above the amount actually required which you turn into stock is a dollar lying idle—non-productive.

It is realized that there were and are times when it is good business to protect yourself against a rising market, but such questions should be referred to the general manager to decide upon, as it is entirely a financial policy.

As stated a few minutes ago, the turnover, that is, the number of times which a company can reinvest its working capital during a year, is a very vital factor now that competition promises to be keener than ever. To keep your

The Purchasing Agent's Slogan

The slogan of all purchasing agents might well be copied from the old railway sign, "Stop, Look and Listen;" that is to say:

STOP

generalizing and specialize. You cannot keep the total stock down to a minimum unless you control each line individually.

LOOK

at your records twice before you buy.

LISTEN

attentively to what each supply house representative says in regard to the markets for the different materials in which you are interested. Courtesy is always rewarded by knowledge.

* Summary of an address delivered by Mr. Thorne before the Purchasing Agents' Association.

stock at the lowest possible point consistent with production or sales, therefore, is one of the purchasing agent's most important duties. Methods to this end, of course, vary with the industry affected, but the plan generally adopted is based upon a perpetual inventory card for each article or material required and states in the following order: the date the purchase is made, the quantity ordered, the price paid, quantity received, quantity issued and quantity on hand. The last column, of course, is the one which determines the purchasing agent's efficiency, and to control this item it is essential to determine for each line handled a minimum and a maximum quantity to be carried. These quantities are governed by several factors, viz.: market, distance of supply house, storage facilities, etc., and cannot be determined without a careful study, but the results which are being obtained by its use more than justify the expenditure of time necessary to instal and operate such a system. To those who are opposed to clerical work of this kind, it may be said here that there are over one thousand failures due to a lack of statistics to every one over-supplied with information, and then the trouble is due to the management not knowing how to make use of the data supplied.

Never keep the factory waiting for material. It may be on the way—it may even be in the custom house—but that is not where it is wanted. Overhead is the "bogey man" to every manufacturer and trader the world over and delays are what it thrives on. Experience alone can tell a man how many chances there are for delays in his particular line, and as far as possible, they should be discounted by placing the order in time. This may seem like unnecessary advice, but the purchasing agent who has had no complaints on this score is truly a remarkable creature. It is realized that there are railroads and other worry-makers beyond his control, but the majority of cases, the open-minded purchasing agents will admit, are not incapable of solution.

A simple example is recalled by the experience of a certain purchasing agent who had considerable trouble with one of his supply houses in getting deliveries made on time regardless of when the order was placed. This purchasing agent was a keen buyer, and having driven a good bargain with the supply house in question, he was naturally loathe to change. Unfortunately, the supply house came to know of the purchasing agent's special regard for their production, and this knowledge only served to further delay matters. It appears that the supply house salesman had seen his competitors' travellers turned away without an order, time after time, and it was thought that this purchasing agent's business was secure, and it would have been, had not the factory superintendent carried the matter to the general manager. Now this purchasing agent splits every large order, wherever possible, between two or more supply houses, so that he is always sure of one.

Apart from deliveries, however, it is, generally speaking, a very dangerous practice to confine the purchase of any one line to a single supply house, if a close price is to be obtained—and what purchasing agent does not take pride in a "good buy?" The purchasing agent should give every salesman who enters his office a courteous hearing. The salesman may not have exactly what is wanted at the time, but if he is told why his line is unsuitable, he at least becomes acquainted with your needs and may be able to interest you later. One of the most successful purchasing agents in this country keeps, in addition to all the catalogues of his supply houses, a book in which is listed the particulars of all verbal quotations made to him, and by judicious handling is often able to secure terms which would otherwise be impossible.

Canadian Reconstruction Association's Activities

By Sir JOHN WILLISON
President, Canadian Reconstruction Association

WHILE Western grain growers are advocating acceptance of the Reciprocity Agreement of 1911 with the United States and free trade with Great Britain in five years, the international economic movement continues toward protection, and there is no indication that the trade agreement of 1911 is now acceptable to the United States.

Upon the return of the head of our Investigation Department from the United States, the Association issued a public statement containing the result of his tariff inquiries and emphasizing the determination of the Republican party to increase the American tariff. A special four-page leaflet was also published by the Association, summarizing Mr. Weaver's reports of proceedings at the Seventh Annual Convention of the Chambers of Commerce of the United States and the Sixth National Foreign Trade Convention. One page of the leaflet was devoted to the following summary of the high tariff movement:

The High Tariff Movement

"In the United States the Republican party has now a majority in the House of Representatives and a probable majority in the Senate, and it has always supported a high tariff.

"The United States Tariff Commission is urging the enactment of a 'bargaining tariff,' even in advance of a general revision of the tariff law.

"A higher tariff for the United States has been forecast by Chairman Fordney of the Ways and Means Committee of the next United States Congress, who will be the author of the new tariff bill. He emphasizes the importance of the home market which, in normal times, consumes between 90 and 93 per cent. of the entire production of the United States. 'I am not in favor,' he says, 'of chasing rainbows around the world to find a market for our surplus, which in amount is only about 7 per cent. of our normal production, and at the same time neglect our home market and open the bars to the flood of goods offered us, made by the cheap labor of the world to the detriment of our own laboring people.'

Public Men's Statements

"Congressman Gillett, of Massachusetts, who will be Speaker of the House of Representatives in the new United States Congress, says: 'At the earliest opportunity there should be passed by the Republicans of the House a protective tariff measure which will provide more abundant revenue and prevent an inundation of foreign goods produced by cheaper labor.'

"Senator Primrose, who will be Chairman of the Finance-Tariff Committee in the new United States Senate, said in a speech before the Manufacturers' Club of Philadelphia: 'Once again we must take up the task, under new and unprecedented conditions, of framing a protective schedule which will provide adequate protection for American capital and labor and secure the industrial independence of the United States. We must prepare for it not, as heretofore, against foreign competition from nations which were either free trade or largely

had merely a protective tariff, but as against industries of nations aided in every conceivable way by government subvention, subsidies, contracts, regulations, and tariffs. In other words, a protective tariff system is more vitally necessary to the United States in the immediate future than ever before in its history. Without its proper enactment, distress and perhaps ruin, will stare our people in the face.'

"Mr. Wm. S. Culbertson, of the United States Tariff Commission, believes there will be a tariff revision upwards after the next presidential election. He is interested in closer trade relations with Canada, but declares they cannot be established on the basis of the Reciprocity Agreement. While technically the offer is still open, he contends that the United States is not under any moral obligation. 'We cannot sacrifice the interests of our Middle West in favor of the Canadian West. Any reciprocity agreement must rather take the form of concessions in non-agricultural products.'

"Mr. Frank Lyon Polk, counsellor for the Department of State, says that the Reciprocity Agreement would have to be reviewed by both Governments before any action could be taken to put it into force.

"In a special article in the *Manitoba Free Press*, Mr. J. A. Viken, writing from Washington, says: 'The reciprocity act of 1911 is regarded as obsolete, and not to be considered as going into force by consent from Ottawa.'"

Poster Advertising Campaign

Plans are now well advanced for the Association's extensive poster advertising campaign for development of the home market and domestic purchase of "Made in Canada" products. In connection with this campaign, the Association has also nearly completed arrangements for the publication and circulation of small illustrated cards suitable for insertion in envelopes. The cards are especially designed for employees, and each one makes some particular appeal for development of the home market. Among such appeals are the following:

Buy "Made in Canada" goods, build up our industries, and thus encourage final process of manufacture in Canada. In 1918 Canada exported unfinished products to the value of more than $900,000,000. If the manufacturing processes of even one-third of these had been completed in Canada, employment would have been given to at least 125,000 more workpeople, close to $125,000,000 would have been provided for additional wages and salaries, and the net value of Canadian products would have been increased by approximately $75,000,000.

To meet its great war debt and reconstruction obligations, Canada must increase production, build up the home market, and develop export trade.

Buy Goods at Home

The Canadian Trade Commission says: "For every million dollars retained in Canada by a refusal to buy other than Canadian goods, a year's continuous employment can be given to at least 1,000 people."

When we buy goods abroad we get the goods and the foreigner gets the money. When we buy goods made at home we get both the goods and the money.

The home market is the best market. Its development means busy factories and prosperous farms. Purchase of Canadian products is a national obligation during the reconstruction period.

The Canadian Reconstruction Association appeals for greater production in field and factory. Every acre seeded is increased wealth for the Dominion. Every active factory is an asset to the state. Buy Canadian products, develop the home market, and pile up prosperity by using "Made in Canada" goods.

No goods purchased abroad are cheap that take the place of our own labor and our own raw material. Spend your money at home and help yourself and your country.

By supporting home industries you develop the home market, encourage export trade, and reduce imports. Every dollar spent for goods produced by Canadian labor means better conditions for Canadian workers.

Canada needs your help now. Over 2,000,000 Canadian men, women, and children are directly dependent on the support you give to Canadian manufacturing industries by buying the products of Canadian labor.

Loss in Wages to Workmen

Every dollar spent on foreign goods represents loss in work and wages to Canadian workingmen. Every dollar spent at home improves the domestic market for manufactured and domestic products and stimulates national development.

In 1918 Canadian imports totalled $906,954,900. If half this money had been spent on Canadian products, it would have given employment to an additional 100,000 workmen, with an increased payroll of nearly $100,000,000.

Build up the home market. The president of the Bank of Commerce says: "Every dollar's worth we buy abroad means that a dollar's worth of work has been diverted from a Canadian workman." Make your money support home industries.

Appointed European Manager

Former Secretary of Montreal Branch to Represent Shawinigan Falls Industries in Europe

An important development in Canadian export trade is forecast by the appointment of H. T. Meldrum, former secretary of the Montreal Branch, C.M.A., to be European manager of the Shawinigan Water & Power Co., with headquarters in London, England. Mr. Meldrum will look after the export activities of the Shawinigan Co.'s industrial subsidiaries—the Canada Carbide Co., the Canadian Electro Products Co., and the Shawinigan Electro Metals Co. The production of these companies was greatly stimulated by the war and the managements are now looking to the export field for the absorption of a good portion of their output. Mr. Meldrum sails for England on June 17th.

Big Industry for Hamilton

Canadian Branch of Porritts & Spencer, Bury, England, to be Located at this Point

An important addition to Hamilton's list of industries was announced towards the end of May. Porritts & Spencer, Bury, England, the largest manufacturers of commercial felt in Great Britain, will establish a plant in Hamilton for the manufacture of felts for paper-making machines and woollen blankets. The name of the Canadian company has not yet been decided upon, but it will probably be the Canadian Porritts-Spencer Company, and it will be incorporated at not less than $1,000,000.

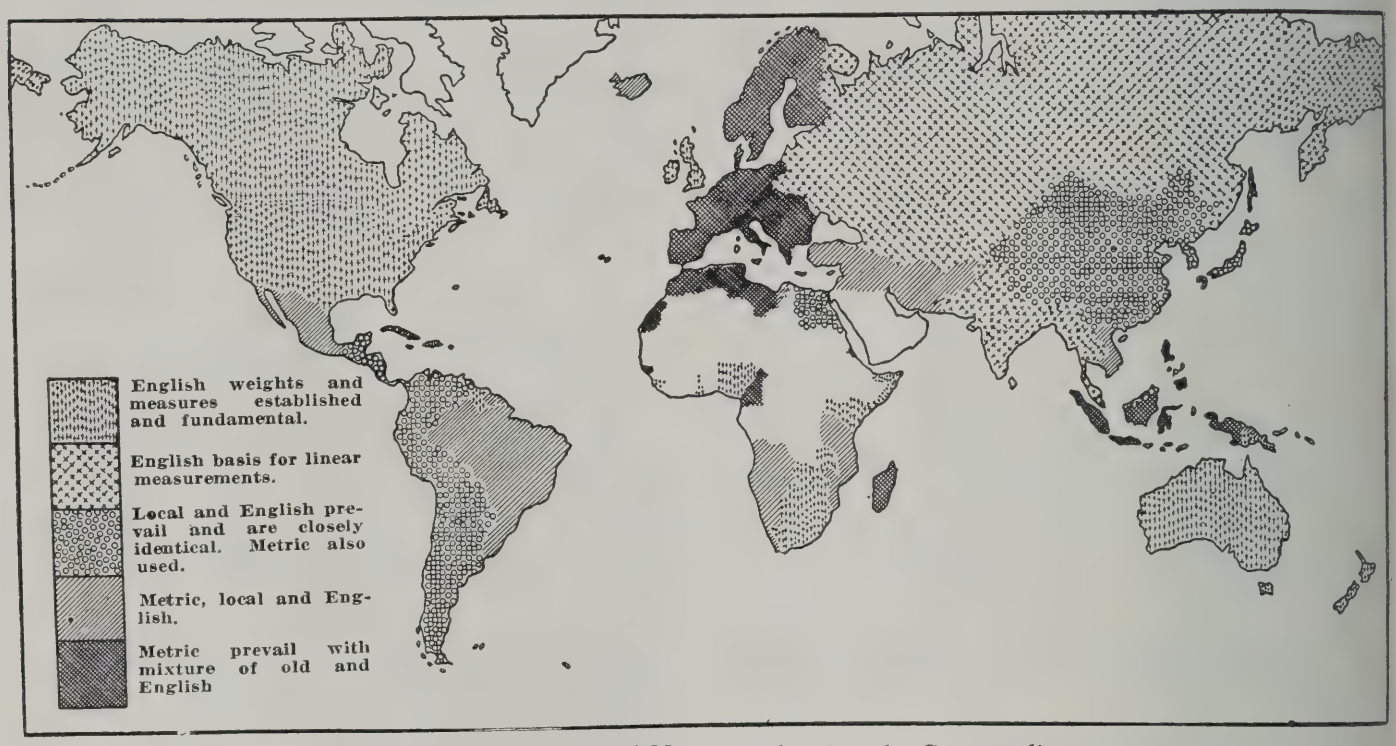
Property has been purchased on Lottridge Street, with frontage of 550 feet and depth of 675 feet. It contains seven and one-half acres and is considered one of the finest industrial sites in Hamilton. The intention is to erect an administration building 80 x 75 feet, four storeys high, and a factory building 100 x 1,000 feet and of saw-tooth roof construction. At the outset 500 hands will be employed.

Besides being the Canadian headquarters, it is the intention to use the Hamilton plant for the handling of export trade. The company does an extensive export business with Japan, which will be taken care of from Hamilton.

Use of the Metric System in Export Trade

From Shovels to Watches and from Wheelbarrows to Automobiles, the Units of Measure to which Goods are Made have Nothing to do with their Saleability in Any Market--An Examination into the Weights and Measures in Use in Latin America Shows that the Metric System is not Generally Employed

By FREDERICK A. HALSEY
Commissioner, American Institute of Weights and Measures



The World's Weights and Measures showing the Commanding Position of the English System

THE problem of the adoption of the metric system does not lie in the introduction of the metric units, but in getting rid of the English units. If the English units are to continue in use, we will have a double standard with infinite complexity and confusion due to their conjoint use. Most of the advocates of the system will not recognize this fact, but it so happens that their favorite authors, Professors Hallock & Wade, in their book The Evolution of Weights and Measures and The Metric System, have presented it in the following very clear language:

> "We are forced to consider a still more serious difficulty, namely, the growth of a dual system, due to the increased use of the metric system as permitted by statute . . . Both systems being legal and the metric measures coming into more widespread use, there would result the perpetual necessity of converting from one to the other in commercial transactions, and while the nation was waiting for the ultimate survival of the fittest system, or the birth of an ideal scheme, incalculable inconvenience and damage would ensue, as has been shown many times in the past."

Investigations of the usage of weights and measures throughout the world have been in progress for nearly twenty years, those given in abstract below being but a portion of the whole. The accompanying map by Mr. S. S. Dale is a graphic summary of all of these investigations which have reached into every country of any commercial or industrial importance on the face of the earth.

Since the outbreak of the world war, we have heard repeated insistence that we must adopt the metric system if we are to succeed in the cultivation of foreign markets. We are told that when selling to others, "we must deal with them in language they understand." We are told that "our weights and measures are meaningless to them," that "they have forgotten their old units," that, in short, "in export trade, we have no choice . . we must come to the metric system."

Facts Regarding Export Trade

Like other metric arguments, there is a specious plausibility about these statements, but instead of relying upon generalities, let us consider the sale of specific commodities.

In normal times, we import large numbers of high-class French clocks, and, similarly, we export tens of thousands of cheap clocks to all parts of the world. It would be absurd for an American purchaser to object to a French clock because it was made to the metric system, and equally absurd to suppose that foreign purchasers would object to our clocks because they are made to the English system. To come still nearer home. American watches are made to both the English and the metric systems, but not one watch owner in a thousand knows or cares to which system his watch was made. You, gentle reader, do not know and never gave the matter a thought. As another illustration, it is not conceivable that a foreign purchaser should fail to select an Ameri-

can typewriter because its parts are made to the English system.

Still another illustration is found in the automobile trade. In former days when the French led in automobile construction, large numbers of French automobiles were sold in this country, but no one ever heard raised as an objection against them the fact that they were made to metric measure. At the present time, the situation is reversed, American automobiles have taken possession of the markets of the world, and the fact that they are made to English measures is nowhere raised against them.

It is precisely so with every other commodity that can be named. From shovels to watches, and from wheelbarrows to automobiles, the units of measure to which goods are made have nothing to do with their saleability in any market.

In the broader view, in normal times we import vast quantities of goods from metric countries which we buy without thought or question of the units of measurement to which they are made. Just as metric countries give no thought to the adoption of the English system in order to sell goods to us, so there is no reason why we should consider adopting the metric system in order to sell goods to them.

I do not, however, ask you to take my word for this.

Investigation of Experience

In no case is any proof given of these assertions, and, it seemed to me, that the proper and natural preliminary to a decision in such an important matter lay in gathering together the experience of manufacturers who are engaged in export trade. I, therefore, prepared a questionnaire in which three leading questions were asked relating, respectively, to the extent of use of the metric system in manufacture, in commerce, and in literature and correspondence for and with countries which are commonly called metric. Over 6,000 of these questionnaires were sent out to exporting manufacturers from whom 1,445 replies were received. In addition to the leading questions, the questionnaire also asked each recipient to give the length of time in which he had been engaged in export trade. An answer to this question involved a searching of records which many were unwilling to make. Of those, who did reply, there were 284 who have been engaged in export trade from ten to twenty years, 225 from twenty to forty years, 48 from forty to sixty years, and 10 from sixty to one hundred years and more—three having been engaged in export trade for more than a century, and one of them for 135 years without finding any occasion for the adoption of the metric system for the benefit of export trade.

Results of the Investigation

In addition to the categorical replies to the questions asked, many returns included in footnotes or accompanying letters remarks regarding their experience. My report on this inquiry includes over 200 extracts from such remarks, and of these I give below a few:

The American Printing Company (textiles) write:

"We have equipped some of our cloth-folding machines to record meters instead of yards, so that we can meet requirements for lengths in meters, but practically all our goods for export are measured in yards."

The American Stove Company (stoves, in export trade "many" years) write:

"As to factory methods of measurement, we have made no change whatever in order to adapt our goods for export. All of our goods are made to English standards of measurement."

F. W. Brode & Co. (cotton seed products, in export trade "many" years) reply that they make no use of the metric system, and add:

"And our exports the past season were approximately $1,000,000."

The Bristol Patent Leather Company (in export trade 12 years) write:

"The largest leather producing countries use the square foot as their basis. Therefore, the square foot is a familiar unit even in countries using the metric system."

The Collins Company (edge tools, in export trade 70 years) write:

"Our business is nine-tenths with foreign countries. We have no need whatever to use the metric system in our business."

The Cudahy Packing Company (packing-house products, in export trade 30 years) write:

"We do an export business amounting to many million dollars per annum, but have not found it necessary to mark our goods with anything but the usual English weights."

The Cadillac Motor Car Company write:

"We have been shipping automobiles abroad for 15 years and have never had the question of metric measurements raised by any of our customers abroad."

The Brown Folding Machine Company (paper folding machinery, in export trade 20 years) write:

"We cannot recall any instance where we have been asked to give anything but United States standard weights and measures."

The Benjamin Eastwood Company (textile machinery) write:

"There is no call for the metric system of weights and measures in building textile machinery for export. We have had many inquiries and cannot remember a single instance where the inquiry has specified that the machinery must be built under the metric system."

Eastman, Gardiner & Company (building lumber, in export trade 12 years) write:

"After the meeting of the National Foreign Trade Council last year, during which meeting the matter of the metric system for foreign business was brought up, we took the matter up with our foreign agents in France, Belgium, Germany, Italy, and England, and asked them if there would be any advantage in our adopting the metric system in figuring lumber. They stated that although the metric system was used in some of the above countries, that in lumber, the buyers were so accustomed to using the English measure that it would be a great mistake to make any change in our method of figuring."

This letter confirms information already in my possession. Lumber is everywhere sawn to the inch. Metric lumber is not to be found in the markets of the world. If the metric system is so much "better," why has it made no impression on the great lumber industry?

Fairbanks, Morse & Company write:

"We have been actively engaged in developing foreign trade for the past fifteen years and our experience touches practically every country in the world. The lines of goods that we manufacture and sell abroad are quite varied, embracing internal combustion engines, steam, power and centrifugal pumps, electrical dynamos, and motors, railway supplies and windmills. We are, of course, sending our goods to countries where the metric system is used, but we have not seen any necessity whatever for abandoning the English standard of weights and measures."

The R. P. Hazzard Company (men's shoes, in export trade 10 years) write:

"We have never had called to our attention any metric system for designating sizes of boots and shoes."

The Independent Pneumatic Tool Company (portable pneumatic tools, in export trade 24 years) write:

"We have never used the metric system, nor have we been asked to do so."

The Lauderdale Cotton Mills (colored cotton goods, in export trade 4 years), say that they make no use of the metric system, and add:

"Our entire output is being exported."

The Penn Engineering Company (steam and water specialties, in export trade 18 years) write:

"We have never used anything except English measures, nor found any need to change at any time."

William Sellers & Company (machine tools and power transmission machinery, in export trade 60 years) write:

"Notwithstanding the large volume of foreign inquiry we receive, so little of it calls for adherence to the metric system as to be practically negligible."

The Southern States Lumber Company (long leaf yellow pine lumber, in export trade 19 years) write:

"Up to eighteen or twenty years ago, our French buyers required their flooring boards to be measured in metrical feet of 13⅛ English inches, but, since then, English measures have prevailed in that market."

The Standard Sanitary Mfg. Co. (plumbing fixtures, in export trade 20 years) write:

"Our trade is using English dimensions more and more. Requisitions are now seldom written up in the metric system."

The Wheeler-Schebler Carburetor Company write:

"We have had no occasion to use the metric system in the manufacture of our products."

The Walter A. Wood Mowing and Reaping Machine Company, who reply that they make no use of the metric system, add:

"We do a large export trade in Scandinavia, France, Germany, Russia, Austria-Hungary and Roumania."

This inquiry has disclosed 600 industries, every one of which exports goods to metric countries, and not one of which makes any use of the metric system in the productnon of its goods. When I say *industries*, I do not mean manufacturers, since many of these industries are represented by more than one manufacturer, automobiles and automobile trucks being represented by 22 manufacturers, agricultural implements by 18, agricultural and harvesting machinery by 19, boots and shoes by 21, cutting tools by 14, chemicals by 19, electric generators and motors by 14, food products by 24, ice and refrigerating machinery by 4, lumber by 19, leather by 14, machine tools by 60, pumps by 19, paper by 13, petroleum products by 7, power transmission machinery by 8, paints, oils and varnishes by 13, printing presses and other printing machinery by 6, rubber goods by 11, steel and iron products by 31, steam boilers by 11, steam engines by 14, oil mill machinery by 5, textiles by 13, textile machinery by 9, wood-working machinery by 8, wagons by 6, and so on.

Extent of Use of Metric System in Export Trade

Of the 1,445 exporters to metric countries who answered this questionnaire, 82 per cent. make no use of the metric system in the production of their goods, 15 per cent. make some use of it, and 3 per cent. ignore the question. The extent of use of the 15 per cent. who report that they do use it is indicated by the following extracts from their letters. While we have 22 makers of automobiles and automobile trucks who make no use of the system, the Paige-Detroit Motor Car Company say:

"At the present time the demand for metric wheels, rims and tires is extremely limited. Since the first of the year, we have only shipped six cars so equipped. Occasionally, we get a request that the spark plug be metric, with which request we comply. This is practically obsolete at the present time, owing to the predominance of American spark plugs, and we have not made shipment of a single car so equipped for over 18 months."

The Hoover Steel Ball Company say:

"We do not have a very large call for the metric sizes, and presume this would not amount to more than five per cent. of our entire export orders."

The Anchor Saw Mills Co., who make boat oars, and who have been in export trade 60 years say:

"It is very rarely that boat oars are ordered by the metric system, as the English foot is used as the unit of length all over the world."

The Modern Tool Co., who have been in export trade 14 years, say:

"According to our records about ten per cent. of the tools supplied to metric countries are required in millimeter dimensions."

A. G. Spalding & Brothers, makers of athletic goods, who have been in export trade 20 years, say:

"We have one or two pieces of apparatus used in physical measurement which we are requested, although very seldom, to make specially to the metric system."

The Abrasive Company, who make grinding wheels, and who have been in export trade 17 years, say:

"The grinding wheels that we supply to countries using metric measure are according to English and metric measures. It would be difficult to give an approximate idea of the percentage of the two kinds of measurements used, but perhaps we would not be far wrong in specifying 3 per cent. metric and 97 per cent. English."

The Avalon Knitwear Company, who make knit goods, say:

"We only use the metric system in our dye house and only to a very limited extent."

The reader will not fail to observe the large importance to the customer of the units of measure used in a dye house.

Baker Brothers, who make keeway cutting tools and who have been in export trade twenty years, say:

"We furnish some cutting tools in metric widths for keyseats, but the majority are furnished in English measurements even for metric countries."

The Landis Tool Company, who make cylindrical grinding machines and who have been in export trade for twenty years, say:

"Not over 5 per cent. of our foreign customers require metric measures."

The Dods Manufacturing Company, who make power transmission machinery and who have been in export trade twenty-five years, say:

"Probably 99 per cent. of our export production is made on English measurements and weights, that is, inches, feet and pounds."

The Electric Hose and Rubber Company, who have been in export trade twelve years, say:

"We ship goods to metric countries made in both English and millimeter sizes, about two per cent. of which are made to millimeters and the balance to English sizes."

The Manhattan Rubber Mfg. Co., who have been in export trade twenty years, say:

"In not more than twenty cases in a year's time goods are ordered from us with the dimensions specified in the metric system."

The Bowen Manufacturing Co., who make shackle bolts and automobile accessories, and who have been in export trade twenty-two years, say:

"On one occasion we had to make a lot of spring shackle bolts having a metric thread at one end."

The Joubert & Goslin Machine and Foundry Company, who make sugar machinery and who have been engaged in export trade for twelve years, say:

"The only time that we are called upon to follow metric dimensions is where we furnish some repair part or make some addition to a machine built in Europe."

The Standard Varnish Works (varnishes, etc., in export trade forty years) write:

"We had one instance several years ago where we had to report dimensions of packages in centimeters, but that is all."

The Addressograph Company (addressing machines, in export trade twelve years) write:

"Only one request for goods to be marked in the metric system in the past twelve years."

Libby, McNeill & Libby (packing house products, in export trade forty years) write:

"About the only business which we have ever done which required special metric packing was occasional French Government business."

The Weights and Measures of Latin America

This assumption that we must adopt the metric system in order to sell goods abroad is based upon another assumption—that, except in the United States, the British Empire and Russia, the system is in universal use. The argument

has special reference to Latin America, which we are assured is wholly metric.

Again it has seemed to me better to learn the facts than to assume them. For about two years past, I have been engaged in an investigation of the weights and measures of Latin America through a questionnaire distributed throughout South and Central America and the West Indies. In order to secure representative and impartial distribution, outside agencies were enlisted in the work, the printed blanks being sent to their branches and correspondents by the National City Bank, the United Fruit Company, W. R. Grace & Company, and the Hill Publishing Company. Additional copies were sent out from my office to names taken from a commercial list obtained from the United Fruit Company and to United States Consuls.

This questionnaire went into all ordinary applications of weight and measure, from the grocery trade to shipping and navigation, and the replies to it cover every country in Latin America except Paraguay and Bolivia. From this, and from other sources, I have had satisfactory information from the metric system be said to be adopted for domestic purchases and sales, while from Uruguay I have such expressions as these:

Lumber and timber: "Officially the meter, customarily per thousand feet."
By carpenters and other woodworkers: "English foot and inch generally used."
In machine shops: "Officially the meter and sub multiples, practically, following the custom, the English inch."
Sizes of pipe for gas, water, sewers, etc.: "Officially the meter, practically the pulgada." (Pulgada is the Spanish name for inch.)
Marine measurements: "Officially the kilometer, to a large extent the marine mile."
"In practice there is no effort to abolish completely the English measures."

In addition to the above, because Uruguay set out to really enforce their metric laws they found them unforceable in units for the measurement of real estate, and they have been obliged to pass a supplementary law authorizing the use of the old Spanish units for this purpose. In other Spanish-American countries where the laws are, nominally, equally drastic but not rigidly enforced, they are, in this application, quietly ignored.

In no other country can the metric system by any stretch of the imagination be said to be adopted even for domestic purchases and sales, but nevertheless in twelve of these twenty countries and the facts that I shall give are as little subject to doubt as is the multiplication table. A detailed report of this inquiry has been published by the American Society of Mechanical Engineers, and I here give an abstract of the results of the investigation.

In but one of the countries investigated (Uruguay) can twenty countries, according to the Director of the Bureau of Standards, the metric system is "obligatory."

In ten of these countries (apart from the railroads and other fields under immediate government control) the metric system has made almost no impression. (Nicaragua, Guatemala, Spanish Honduras, Cuba, Panama, Colombia, Porto Rico, San Salvador, Ecuador and Costa Rica.)

Of these ten countries, according to the Director of the Bureau of Standards, the metric system is "obligatory" in seven. In five of them (Cuba, Colombia, Porto Rico, Panama and Spanish Honduras) the English units are used far more than the metric, having largely supplanted all others, although in three of them, according to the Director of the Bureau of Standards, the metric system is "obligatory." Not only has the English pound come into large use, but the arroba and quintal have been adjusted in value to make them equal to 25 and 100 English pounds respectively. In substantially all of the countries investigated, the English inch is used for mechanical purposes, as the English nautical units are used for navigation and sea shipments. That most derided of English units—the nautical mile—is used by all countries that sail the seas and they use no other. The kilometer is an unknown measure at sea.

In all countries the impression made is in direct relation to the severity of the laws, of which we have the climax in Uruguay, with Venezuela and Argentina not far behind. In all cases the movement was begun with mild laws under the impression that the adoption of the system was a simple and easy thing to bring about. Such laws failing, more drastic ones followed, but even these have been but partially effective. The greatest progress has been made in the field of domestic retail trade in which weights and measures are under the immediate eye of officers of the law.

Reports of Tourists

It is this field which comes under the observation of tourists. One may tour through, or, for that matter, live in a country for many years, in many walks of life, without coming in contact with weights and measures outside the field of retail trade, and we thus see why the reports of tourists are more favorable to the metric system than the facts justify, as we also see why the observations of tourists, in a comprehensiveness, have very limited value.

The further we get from the field of retail trade, the less is the system used. In this field the progress is chiefly with units of weight and capacity, the measure of length for the sale of dry goods being commonly the vara (the Spanish yard), while imported wearing apparel of all kinds is commonly sold by the units of the country of its origin, and by the inch at least as much as the centimeter, and domestic products are frequently made to numbered sizes, of which the relation to any system of units is not apparent. They are not metric.

In primary or wholesale markets the old measures prevail, although these, in some cases, have been adjusted in value to make them even multiples of English basic units. We have here perfect examples of the simple process of unification of English and Spanish measures which, with proper encouragement, might by this time have become substantially universal.

Lumber and timber are almost universally sawn to the inch, although frequently mixed with the vara or the meter for length, and the square and cubic meter as sales units, prices being made at so much per square or cubic meter for one inch boards. This is called "using the metric system."

In the mechanical trades, the tailors and seamstresses use all three systems, as do stone and brick masons, while carpenters commonly use the pulgada or inch. In machine shops, both English and metric units are used, depending chiefly on the country of origin of the machines they have to repair. The inch is predominant.

Some Actual Experiences

In this connection we have the report of The Cleveland Twist Drill Company that shipments of their tools to South America are "95 per cent. to 100 per cent. English," and of the Detroit Twist Drill Company that "All of our South American customers use more English sizes than metric." Needless to say, English sized twist drills are bought in order to make English sized holes for they will make no other.

In ship and boat building, also, the English units find large use, while in mining and smelting we find a miscellaneous mixture of all three systems. The persistence of old units is most pronounced in the measurement of land. When units of measure are once anchored in titles to real estate, they are there to stay. Of this, we have perfect examples in the use of the French arpent in Louisana and the Spanish vara

(*Continued on page* 89).

AMONG THE INDUSTRIES

Under this heading are published items of news of current interest concerning the activities of Canadian manufacturers. Information about changes of interest, enlargement of plants, and plans for future developments are welcome, and are published free of charge, provided they should not be properly classified as advertisements

***Items prefixed with an asterisk are based on official information received in each case from the companies mentioned. Other items, while secured usually from reliable sources, have not the same authoritative origin**

ALBERTA

Edmonton.—W. C. Caton, G. H. Way, and R. Blackerby have installed a complete new equipment for electro-plating in the city at 10154 102nd Street. W. C. Caton, B.Sc., formerly with the city engineering department of the city, and now with the Bulletin Co., Ltd., has financed this new enterprise.

BRITISH COLUMBIA

Clayoquot.—The Clayoquot Cold Storage and Canning Co. is building a plant at Clayoquot, which is to include cold storage and canning equipment, involving an expenditure of $150,000.

Falkland.—The B.C. Gypsum Co. is planning to erect a plaster mill here.

Nelson.—The McDonald Jam Co. are erecting a two-story cement and granite jam and candy factory, 100 x 120 feet in size and with 22,000 square feet floor space. The plant will be equipped with up-to-date machinery, and it is expected that a million pounds of fruit will be handled this season.

Port Hammond.—Residents of Port Hammond, B.C., are justly proud of the war record of the sawmill located there. This mill turned out more lumber for use in aeroplane construction than any other mill in British Columbia, and in this instance that means the whole Dominion. The mill company have a letter on file which proves the statement, and congratulates the management on the enviable position thus won. When labor was scarce the mill owners made attractive offers in order to secure female help, and at one time eight patriotic young ladies were engaged in jobs that are generally looked on as men's work. Records show that they did these jobs as well as men could have done them.

New Westminster.—The British Columbia Manufacturing Co. has obtained a permit to erect a new export plant at Queensborough.

Prince Rupert.—The plant of the Prince Rupert Lumber Co. has been leased to the Prince Rupert Mills Co., Ltd., which concern has just been organized. It is composed of Vancouver lumbermen under the able management of A. A. Ewart, who is a competent and experienced lumberman. The Prince Rupert Spruce Mills Co. started operations early last month on a commercial basis. The past operations by the retiring company under Mr. Duby, have been under contract with the Imperial Munitions Board for supplying airplane spruce.

Vancouver.—The Hyatt Steel Products Company has reopened the rolling mill at Port Moody and has made several improvements to the building and plant acquired by them from the Tudhope Electric Metals Co. at False Creek. The company is also increasing and improving its steel plant on Industrial Island.

The Beaver River Lumber Company has commenced work on the reconstruction of its mill and plant near Jackman, on the County Line Road, which was destroyed by fire early in April. Both the sawmill and shingle mill, which were destroyed at a loss of $75,000, will be rebuilt.

The Dominion Canners' Association is absorbing a number of the British Columbia fruit canneries, these including the Vantoria Canning Company, the Kelowna Packing Company and Food Products, Limited. This amalgamation now includes over fifty per cent. of the fruit and vegetable canning enterprises of the Province, and the new company, which has its own charter, will be operated independently of the eastern plants of the company.

The Morrison Steel & Iron Works has taken out a permit for a new factory on Industrial Island. The building, which is to be of mill construction and sheet iron, is to cost $28,500.

Vernon.—The Vernon branch of the Graham Evaporating Co., Belleville, Ont., which closed down early in April, paid, during the past season, over $127,000 for potatoes to the farmers of the Okanagan district. During the season $70,000 was paid in wages by the company, which shipped nearly two million pounds of desiccated potatoes, which were purchased by the American Government for its overseas army.

NEW BRUNSWICK

St. John.—It is expected that before long an adjustment of the shell contracts which the McAvity Company were engaged in at their Marsh Road plant will be reached, so that the firm will be free to develop the plans which they have in view for these immense works. In the meantime the new steel foundry in the rear of the munition factory is being completed and made ready for work. The firm are also carrying on their general foundry manufacturing business in their Broad street and Water street plants, turning out brass material of various kinds and material for ships, railway and mining purposes. It is intended that before long all the city plants of this enterprising firm will be assembled in their Marsh road buildings.

The advantages of St. John as a food distributing point for the Maritime Provinces and overseas is shown by the fact that the Swift Canadian Co., Ltd., and the Armour Company have both acquired properties on the railway line and propose establishing large meat storage depots at an early date. In addition to these operations, Gunns, Ltd., under the management of Mr. J. A. Kennedy, have for a number of years carried on a successful and growing business at this port. More recently, the Harris Abattoir Company have established themselves here. Further development along this line is talked of.

The Canadian Cottons, Ltd., who have a large plant at Milltown, N.B., are planning a diversion of the St. Croix river at that point and the establishment of a large power station. The Company's plans will involve an expenditure of over half a million dollars. The Canadian Cottons, Ltd., have two large mills at St. John, the York and Cornwall. These have been very busy throughout the war and are still doing a large business.

NOVA SCOTIA

Glace Bay.—The Dominion Coal Co. is erecting a turbo compressor at its Springhill Mine in Cumberland County. The plant was ordered in the early part of 1915 but, owing to war orders, it was not delivered until the end of 1918. The compressor is turbine-driven and is of nine thousand cubic feet capacity. It is a mixed pressure type, but will be largely operated by exhaust steam. Condensers and cooling arrangements form a part of the installation. The air will be used for pumpnig, haulage and other classes of work in the mine and in particular will replace steam at large pumps that have been installed for many years.

ONTARIO

Arnprior.—Kenwood Mills Ltd., have awarded a contract for the construction of a large fire-proof wool room.

Blind River.—McFadden & Malloy, of Spragge, Ont., have purchased the mills, stock and timber concessions of Eddy Bros. & Company, Blind River, Ont. This important deal, which was recently concluded, gives McFadden & Malloy a cutting capacity of about 300,000 feet a day. The plant of Eddy Bros. & Company, whose headquarters are at Bay City, Mich., has been established in Ontario for some fifteen years, and is erected on the Soo branch of the C.P.R., about sixteen miles west of Spragge, where McFadden & Malloy's mill is situated. The capacity of the Eddy plant is 125,000 feet a day, and the equipment consists of two band saws, a gang saw and a gang edger, together with the usual accessories.

Chatham.—The Hayes Wheel Co., which was engaged in the manufacture of munitions during the war, is now producing auto axles, parts of which have not been made in Canada before. The company will deliver the axles to the various automobile companies in Canada.

Cobalt.—The sampling plant of Campbell & Devell, has been taken over by the government and is henceforth to be known as the Timiskaming Laboratories.

Cobourg.—Contract has been awarded for the construction of a brick and cement factory here for the Douglas Packing Co., Rochester.

Elmira.—A new warehouse and addition to factory buildings for the Great West Felt Co., Limited, will be erected shortly.

Goderich.—Announcement has been made of the formation of the Huron Steel Corporation with a capital of $15,000,000, to engage in the manufacture of automobiles, trucks, and parts. The building of a hydro power line to furnish 25,000 h.p. for use at the plant and the enlarging and deepening of the harbor are among the improvements aimed at in connection with the establishment of the industry.

Guelph.—Contract has been let by the Northern Rubber Co. for the erection of a building costing $100,000.

A building permit has been issued to the Carpet and Worsted Spinning Mills for erection of a new mill and dye house, at a cost of $35,000.

Hensall.—The Jackson Mfg. Co., of Clinton, have decided to erect a plant here.

Hamilton.—Zimmerman-Reliance Limited have completed a third story, 450 feet long by 63 feet wide, over the whole of their plant here. The extension has been erected to take care of the hosiery department which is developing very rapidly. The company have also included a recreation and welfare room for employees, eighty feet square, and they anticipate that it will be one of the finest rooms of its kind in Canada when completed.

Mercury Mills, Limited, are extending their main mill about 125 feet, using the same type of construction, reinforced concrete, as in the present building.

Extensions costing about $35,000 are being made by Wagstaffe, Limited. These include putting part of the second story on and adding new boiler and stoker. The latter are for the

candied peel department, a new industry for this country, since Canada has always been supplied previous to the war by English manufacturers.

Plans for the erection of a new modern two-story factory for the National Paper Goods Company, are being prepared by the architect, F. W. Warren. The site will be next to the site recently secured by the Hoover Suction Sweeper Company.

J. B. Nicholson Co. is erecting a new factory and the Nukol Fuel Co., Limited, plans a new plant.

Harrow.—Quality Canners, Limited, will erect a factory here at a cost of about $12,000.

Hastings.—The Hastings Tannery, owned by the Breithaupt Leather Co., of Kitchener, which was destroyed by fire in October, 1917, will probably be reopened in July. It has been rebuilt at an expense of $200,000. The new building is in the same site as that of the former plant. The main building, a two and a half story erection, built of concrete block, covers 205 by 130 feet and is alone valued at $50,000. On the lower floor 120 to 150 vats are being speedily installed, and when completed will have a capacity for tanning 400 sides a day, making the output the second largest in the province. The product of the factory, oak sole leather, will be distributed from Kitchener. In the upper part of the building, in a room measuring 150 by 130 feet, the drying by artificial means will be carried on. In all the buildings will number six, each built of concrete.

Ingersoll.—A by-law will be submitted to the ratepayers granting a loan of $18,000 to the Royal Broom Co.

London.—A plant costing half a million dollars will be erected here by the Republic Motor Truck Co.

An addition to their shoe factory will be made by the Scott, Chamberlain Co., Richmond and Bathurst Sts.

Oshawa.—The Ontario Steel Products Co., Ltd., will erect a factory, 80 x 315 feet, in Oshawa, Ont., and will employ 70 to 100 men from the start.

Otterville.—The foundation is being laid for a large shoe factory on Main street of this town, for the Tred Rite Shoe Company, which has succeeded the G. L. Williams Co., lately burned out. The building will be cement, one story high and near the railroad. A number of the best farmers in the township are taking an active and financial interest in the company.

Peterboro.—The city council last month passed a by-law to authorize entering into an agreement with the Stickney Motors Limited, St. Paul, Minn., under which the company agrees to take over the old cordage works recently vacated by the Renfrew Mfg. Co., and manufacture farm tractors, motor trucks and gasoline engines employing for nine months each year for ten years, a minimum of 50 employees. Tax exemption will be granted by the city.

Port Arthur.—On May 5, the Port Arthur Shipbuilding Co., Limited, launched the steamer, "Canadian Trader," one of the Canadian government's merchant marine fleet. She is a full canal-sized ocean freighter of 3,400 d.w. tons, steel, screw, single deck type, with a straight stem and semi-elliptical stern, built on the transverse system with poop, bridge and forecastle. She has a length of 260 feet over all.

Port Hope.—A plant to manufacture in Canada the famous Hauck oil burners has been established by the Canadian Hauck Burner Co., Limited. These burners are used by many of the most progressive concerns in the Dominion, who have recognized the great advantages of oil over all fuels.

Port Colborne.—Work on the Canada Cement Company's potash plant is progressing satisfactorily.

St. Mary's.—The St. Mary's Flax Co. contemplate purchasing a site and erecting a factory.

St. Thomas.—Stock is being subscribed locally to further the establishment here of the Provincial Machine Co., which will manufacture talking machines and talking machine parts, and there is every prospect of the plant being established shortly. No details are as yet available regarding the size of the plant.

Nursery Shoe Co., Limited, Mondamin St., plans erection of a $12,000 addition to factory.

Sarnia.—Ferguson & McCutchen are converting the northern section of the old woollen mills building, Front street, into a cold storage plant.

The Romeo Foundry Co., Port Huron, will erect a $50,000 foundry here.

Stratford.—Contracts have been let for the construction of an addition to the plant of the R. M. Ballantyne Co., the work to be completed in September. The cost will be about $30,000.

Toronto.—The Toronto Butchers' Supply Co., 61 Ossington avenue, will erect a plant.

Puddy Bros., Limited, will make an addition to their abattoir.

A new story is being added to the Glidden Varnish Company's largest building, which will give the company double its present grinding capacity. The enlargement has been rendered absolutely necessary by largely increased business.

Announcement that Dodge Bros., Detroit, were aobut to erect a factory in Canada for the manufacture of the Dodge line of automobiles is premature. The company have had the erection of a plant in Canada under consideration for some time, but with the present unsettled state of affairs, there is no knowing when a final decision will be reached.

Plans are in progress for an addition to the factory of William Wrigley, Jr., Carlaw Ave.

The Cowan Co., Limited, 72 Sterling Road, will make an addition to their factory.

Walkerton.—The Canadian Spool & Ribbon Co. wil lerect an addition to their plant at a cost of $10,000. Ratepayers voted favorably on a by-law extending assistance.

Weston.—The K. & S. Canadian Tire & Rubber Co., Limited, intend to double the capacity of their present factory by the addition of an extension which will be used principally for doing special molded rubber work. The company manufacture a complete line of druggist's rubber sundries and hard rubber fittings and do a nice business in special orders for firms requiring special molded work.

Windsor.—The Champion Spark Plug Company will erect a $250,000 building in the factory district and will employ one hundred hands at the start. A by-law granting the company tax-emption was passed on May 12th.

The Leggett & Platt Spring Bed Co., Limited, are adding a second story to their main building, 131 x 51 feet. The addition is of brick construction with steel sash, and is being made to take care of increased business.

Work on the new plant of L. W. Lawrence and Co., to be constructed on one of the city's factory sites, will begin within the next few weeks.

Wingham.—The Aero Cushion Tire Co., which has been organized locally, has purchased two buildings from the Western Foundry Co., and will make the necessary improvements to enable the manufacture of tires to be proceeded with. Officers and directors are local business men.

QUEBEC

Cap de la Madeleine.—The St. Maurice Paper Co. will build a machine shop and model shop here at a cost of $25,000.

Chicoutimi.—An addition is to be made to the mills of the Chicoutimi Pulp & Paper Co., at a cost of $375,000.

Grand Mere.—A $30,000 finishing-room is being erected by the Laurentide Co.

Lachine.—Lague Heating System, Limited, 56 St. Patrick st., plans to make an extension to its factory.

Lac au Saumon.—The Salmon Lake Drive & Boom Association, Limited, are considering the question of erecting a large wood and pulp plant here.

Montreal.—The three-story addition for the Tetrault Shoe Company on Demontigny street east, has now been practically completed. The interior work is well advanced.

A contract has been let for the erection of a $45,000 factory for Thos. Davidson Mfg. Co., Delisle st.

An addition is being made to the factory of the Acme Glove Works, Limited, 181 Vitre St. E.

Plans are being prepared, it is said, for a new plant for the Montreal Portland Cement Co.

The erection of a $150,000 abattoir is planned by the Montreal Abattoirs, Limited.

The Maple Leaf Mfg. Co., Limited, has been incorporated at Ottawa, with Kenneth Molson, of Montreal, as president, to take over the Lachine plant of the Machinery and Munitions Board, Limited, as well as the Windsor plant and general interests of the Menard Motor Truck Co., Limited, who have been manufacturing motor trucks in Canada since 1908.

Plans are in progress for $25,000 extension to plant of Dupont & Freres, Aird Ave., Haisonneuve.

Point aux Trembles.—An extension will shortly be made to the factory of Canadian Footwear Co.

Quebec.—Duchaine & Pedkins, Crown St., are making a $35,000 addition to their factory.

St. Boniface.—J. W. Boisvert has purchased a site for the erection of a $10,000 factory.

Sherbrooke.—The Canadian Connecticut Cotton Mills are erecting a four-story addition at an estimated cost of $50,000.

Three Rivers.—It is reported that American capitalists propose to erect a beet sugar factory in this district.

McKinnon Radiators

The McKinnon Industries, Limited, have recently issued a small pamphlet illustrating and describing their new Cellular Radiator which will be supplied to the manufacturers for use on standard makes of automobiles in Canada. From time to time in the history of the automobile industry various forms of radiators have been made and tried, only to be discarded for this and that reason. To-day it is conceded that the most effective radiator for the automobile is of the "cellular type." The process adopted by the McKinnon Industries in making their cellular radiator is explained and its superior merits pointed out. Those interested in the subject should write for further descriptive matter.

IMPERIAL BANK OF CANADA

Forty-fourth Annual Meeting of the Shareholders

Held at the Head Office, Toronto, Wednesday, May 28th, 1919, at 12 Noon

The Forty-fourth Annual General Meeting of the Imperial Bank of Canada was held in pursuance of the terms of the Charter at the Banking House of the Institution, May 28th, 1919.

THE REPORT

The Directors have pleasure in presenting to the Shareholders the Forty-fourth Annual Report and Balance Sheet of the affairs of the Bank as on 30th April, 1919, accompanied by statement of Profit and Loss Account, showing the result of the operations for the fiscal year.

The balance at credit of Profit and Loss Account carried forward from last year was	$1,204,942 91
The net profits for the year, after deducting charges of management, Auditors' fees and interest due depositors and after making provision for bad and doubtful debts and for rebate on bills under discount amounted to	1,247,516 75
Making a total at credit of Profit and Loss Account	$2,452,459 66

This amount has been applied as follows:—

Dividends at the rate of 12 per cent. per annum	840,000 00
Annual Contribution to Officers' Pension and Guarantee Funds	42,500 00
Special Contribution to Pension Fund	100,000 00
Contributions to Patriotic and other War Funds.	34,500 00
War Tax on Bank Note Circulation	70,000 00
Transferred to Reserve Fund	500,000 00
Balance of Account carried forward	865,459 66
	$2,452,459 66

Branches of the Bank have been opened during the year as follows:—

In Alberta:—Bear Lake, Crossfield, Daysland, Edson, Grande Prairie, Greencourt, Rocky Mountain House, Sangudo, Spirit River, Sylvan Lake, Waterhole.

In British Columbia:—Kimberley.

In Manitoba:—Gimli, Riverton.

In Quebec:—St. Jovite Station.

In Ontario:—Toronto—Danforth and Carlaw, Queen and Carlaw, St. Clair and Boon, Leaside; Simpson Street, Fort William; Grand Valley, Glenmorris, Kirkland Lake. Port Robinson, Queenston, Richards Landing, Smooth Rock Falls. Welland South, Waldemar.

In Saskatchewan:—Canwood, Dafoe, Edenwold, Fielding, Hepburn, Krydor, Lestock, Piapot, Waldheim.

The following branches have been closed:—

In Ontario:—Iroquois Falls, Leaside and Mount Dennis.

In Saskatchewan:—Kandahar and Lestock.

Since the close of the fiscal year branches have been opened at Colinton, Rockfort and Whitecourt, Alberta; Westminster and Arlington Streets, Winnipeg, Manitoba; Matheson and Nobleton, Ontario.

The Head Office and branches of the Bank have, as usual, been carefully inspected during the year and the Auditors appointed by the Shareholders have also made their examinations as required by the Bank Act. Their Report and Certificate will be found attached to the Balance Sheet. They offer themselves for reappointment.

It is with much regret that your Directors have to report the death during the year of Mr. Cawthra Mulock and Hon. W. J. Hanna, K.C. Their places on the Board have been filled by the appointment of Mr. Frank A. Rolph and Mr. Robert S. Waldie.

Owing to ill-health, Mr. Edward Hay was obliged during the year to relinquish his position as General Manager. His place has been filled by the appointment of the Assistant General Manager, Mr. William Moffat, who has been in the service of the Bank since 1881.

The Directors have pleasure in again testifying to the satisfactory manner in which the officers of the Bank have discharged their respective duties.

All of which is respectfully submitted.

PELEG HOWLAND,
President.

Liabilities

Notes of the Bank in circulation		$11,870,723 00
Deposits not bearing interest	$21,486,089 28	
Deposits bearing interest, including interest accrued to date of Statement	61,712,144 91	
		83,198,234 19
Balances due to other Banks in Canada	$792,522 85	
Due to Banks and Banking Correspondents in the United Kingdom	595 42	
Deposits by and Balances due to Banks elsewhere than in Canada and the United Kingdom	609,347 44	
Acceptances under Letters of Credit (as per contra)	139,575 00	
		1,542,040 71
Total Liabilities to the public		$96,610,997 90
Capital Stock paid in		7,000,000 00
Reserve Fund Account	$7,500,000 00	
Dividend No. 115 (payable 1st May, 1919) for three months, at the rate of 12 per cent. per annum	210,000 00	
Balance of Profit and Loss Account carried forward	865,459 66	
		8,575,459 66
		$112,186,457 56

Assets

Current Coin held by the Bank ...	$2,573,248 73	
Dominion Government Notes	9,554,118 00	
		$12,127,366 73
Deposit in the Central Gold Reserves		6,000,000 00
Deposit with the Minister for the purposes of the Circulation Fund		389,491 77
Notes of other Banks		840,795 00
Cheques on other Banks		4,364,152 52
Balances due by other Banks in Canada		603,324 47
Due from Banks and Banking Correspondents in the United Kingdom		323,970 95
Due from Banks and Banking Correspondents, elsewhere than in Canada and the United Kingdom		3,008,947 32
		$27,658,048 76
Dominion and Provincial Government Securities, not exceeding market value	$5,934,919 21	
Canadian Municipal Securities, and British, Foreign, and Colonial Public Securities other than Canadian	14,702,059 33	
Railway and other Bonds, Debentures and Stocks, not exceeding market value	775,397 91	
		21,412,376 45
Loans to Provincial Governments..	$37,000 00	
Loans to Cities, Towns, Municipalities and School Districts	4,610,473 30	
Call and Short Loans (not exceeding thirty days) in Canada on Bonds, Debentures and Stocks...	4,866,495 25	
		9,513,968 55
		$58,584,393 76
Other Current Loans and Discounts in Canada (less rebate of interest)		48,544,711 12
Liabilities of Customers under Letters of Credit (as per contra)		139,575 00
Overdue Debts (estimated loss provided for)....		376,949 44
Real Estate (other than Bank Premises)		548,886 27
Mortgages on Real Estate sold by the Bank.....		539,034 48
Bank Premises, at not more than cost, less amounts written off		3,390,333 92
Other Assets, not included in the foregoing		62,573 57
		$112,186,457 56

Auditors' Report to Shareholders

We have compared the above Balance Sheet with the books and accounts at the Chief Office of Imperial Bank of Canada and with the certified returns received from its Branches, and after checking the cash and verifying the securities at the Chief Office and certain of the principal Branches on 30th April, 1919, we certify that in our opinion such Balance Sheet exhibits a true and correct view of the Bank's affairs according to the best of our information, the explanations given to us and as shown by the books of the Bank.

In addition to the examinations mentioned, the cash and securities at the Chief Office and certain of the principal Branches were checked and verified by us during the year and found to be in accord with the books of the Bank.

All information and explanations required have been given to us and all transactions of the Bank which have come under our notice have in our opinion been within the powers of the Bank.

G. T. CLARKSON, F.C.A.

R. J. DILWORTH, F.C.A.

of Clarkson, Gordon and Dilworth.

The customary motions were made and carried unanimously.

Mr. G. T. Clarkson, F.C.A., Toronto, and Mr. R. J. Dilworth, F.C.A., Toronto, were appointed Auditors of the Bank for the ensuing year.

The Scrutineers appointed at the meeting reported the following Shareholders duly elected Directors for the ensuing year: Messrs. Peleg Howland, Elias Rogers, William Ramsay (of Bowland, Stow, Scotland), William Hamilton Merritt, M.D. (St. Catharines), Sir William Gage, Sir James Aikins, K.C. (Winnipeg), John Northway, J. F. Michie, Sir James Woods, E. Hay, Frank A. Rolph, R. S. Waldie.

At a subsequent meeting of the Directors Mr. Peleg Howland was re-elected President and Mr. Elias Rogers, Vice-President, for the ensuing year.

PELEG HOWLAND, President.

W. MOFFAT, General Manager.

Condensed Advertising

FOR SALE

One Hydro Extractor, Craig make; basket 17 inches depth, 44 inches diameter. Good condition. For further particulars apply Slingsby Mfg. Co., Ltd., Brantford, Ont.

FOR SALE

Davis & Furber mule, 360 spindles, 2¼-inch gauge, 24 spool drums, 15 ends per spool. Machine in good condition. For full particulars apply Slingsby Mfg. Co., Ltd., Brantford, Ont.

FOR SALE

One Rope Wheel, 10 grooves, 4 ft. 3 ins. diameter, 5 15/16 ins. bore. One Rope Wheel, 10 grooves, 8 ft. 6 ins. diameter, 5 15/16 ins. bore. 10 Manilla Ropes, 1¾ ins. diameter, 4-strand, each about 175 ft. long (spliced). In good condition.

100 ft. 3 7/16-inch shafting, and 6 hangers for same; also 500 ft. 1¾-inch Manilla Rope, 4-strand (new). For further particulars apply The Slingsby Manufacturing Co., Ltd., Brantford, Ont.

FOR SALE

At Niagara Falls, Ontario, The Power City, solid brick building, two stories and basement, 40-h.p. boiler, hand elevator, eight thousand feet floor space; lot 40 x 120, additional land available; price reasonable; adjacent to post office and railways; possession June 1st; good opportunity to secure factory building at before war price. For particulars address Mortimer & Bampfield, Niagara Falls, Ontario.

WANTED

Agencies or representation for sound manufacturing firms by qualified engineer and officer in engineers. Twelve years' experience. Capable of handling any sound proposition. Full particulars and references submitted if desired. Box 3500, INDUSTRIAL CANADA.

FOR SALE

30 Ampere Rectifier, A.C. 110/220 volts—D.C. 30/118 volts. General Electric type N.S. 4, $200.00. Toronto and Hamilton Electric Co., Limited, 99-103 MacNab St. North, Hamilton, Ont.

Conservation of Property

Paint for Preservation is Absolutely Essential for the Conservation of Property

Property waste due to deterioration and decay in Canada constitutes a problem of paramount and far-reaching importance. Continuation of the present tremendous loss vitally affects the economic future of the country. If with the cessation of the war, we are to enter successfully upon a period of reconstruction and expansion it is imperative that conservation go hand in hand with development. It is as necessary to conserve created wealth as it is to prevent waste of national resources. Nature in time may restore devastated forest areas but it takes human labor to raise anew or repair property that has decayed from lack of protective paint. This work absorbs energies that would otherwise be devoted to industrial and economic progress. Paint for preservation is absolutely essential to the conservation of property.

COST CONTROL

Never in the World's history were minutes as valuable as they are to-day. Never in the history of business was the necessity of cost control greater than it is to-day, because

1. **Overhead expense is continually growing larger.**
2. **Employees' disputes and demands are becoming more frequent.**
3. **Competent help is always hard to get and to keep.**
4. **The wage bill keeps piling up.**

How your men occupy their time AFTER they reach the bench—how much of their time is Productive and how much Non-Productive, is shown you by the

International Cost Recorder

Suppose you have 40 men in a department and the purchased labor for the week is 1,000 hours. Suppose a foreman finds out that it was only 900 hours. Can he force a balance to bury this leakage ?

NOT if the time records are PRINTED on International Job Cards.

That's the kind of question that implies success or failure for your business.

Let us send you our latest folders

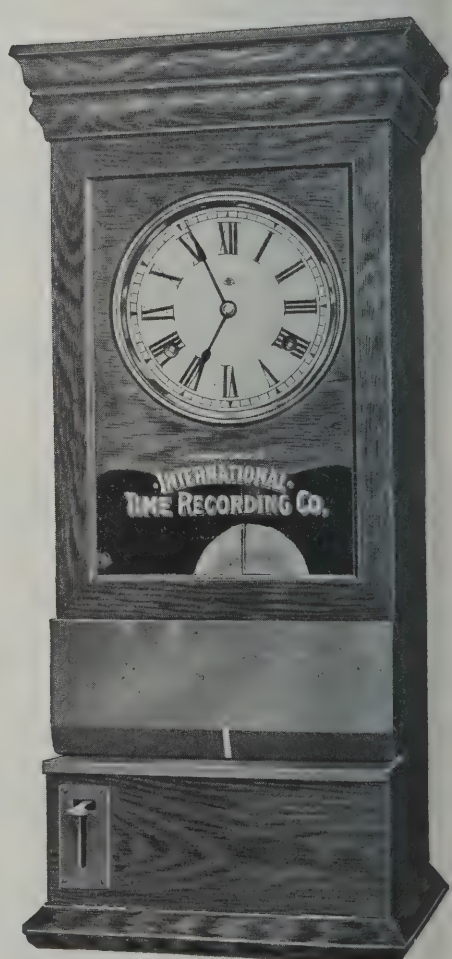
nternational Business Machines Co., Limited

(TIME RECORDER DIVISION)

FRANK E. MUTTON,
Vice-Pres. and Gen. Mgr.

Royce and Campbell Avenues
TORONTO

Also at Montreal, Winnipeg and Vancouver



International Cost Recorder

(Also makers of Dayton Computing Scales and Hollerith Electric Tabulators)

Your Pay-Roll Cannot Stand "Leaks" Just Now Through Lost Labor Time

How can you detect them? *With an International Cost Recorder*

Pencil records made by human hands — whether of employee or foreman—can never form an absolutely sound basis of arriving at your production costs.

Without accurate "cost knowledge" you simply don't know where you are.

With an International Cost Recorder you get correct, unchangeable, PRINTED records of the time each job was started and the time it was finished.

NAME Robert Sherman NO. 18 DATE FEB 15 1915

PART NO	OPER'N NO	PIECES	REJECT	ORDER NO	COST		RATE	Elapsed Time	CLOCK RECORD
						S			S 15 9.2
278	161	50	1	639	.44	B	20	2.2	B 15 11.4
						S			S 15 11.1
K79	161	75		651	.38	B		1.9	B 15 9.2
						S			S 15 13.3
874	89	100	2	672	.20	B		1.2	B 15 11.1
						S			S 15 16.4
618	161	250		678	.62	B		3.1	B 15 13.3
						S			S 15 17.0
K83	78	25		712	12	B		.6	B 15 16.4
						S			S
						B			B
						S			S
						B			B
						S			S
						B			B
						S			S
						B			B
						S			S
						B			B
				TOTAL COST	1.80			9	TOTAL TIME

This fac-simile card illustrates the record made with our No. 1008 International Cost Recorder. The printing wheels combine numerical symbol printing the date, hour wheel printing 1 to 24, printing the minute wheel printing tenths hours. Third item shows meal deduction of one hour to cover lunch period.

Above shows a sample International "job card" with the printed record of the actual working time spent on five jobs.



International Cost Recorder

Your pay-roll is your largest "raw material" purchase

How do you arrive at the difference between the Labor you buy and your *Productive Labor?*

Your aim is to keep down the non-productive hours of your workmen. How can you do this without the fundamental requisite: A PRINTED RECORD of the actual productive time used?

Pencil records "don't go"—in time records any more than would pencil-written cheques—and for the same reason.

Let us help you solve the real time-keeping problem in your Plant

International Business Machines Co., Limited

(TIME RECORDER DIVISION)

FRANK E MUTTON, Vice-Pres. and Gen. Mgr.

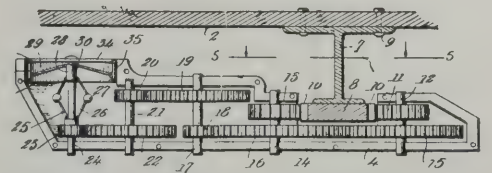
Royce and Campbell Avenues TORONTO

Also at Montreal, Winnipeg, Vancouver

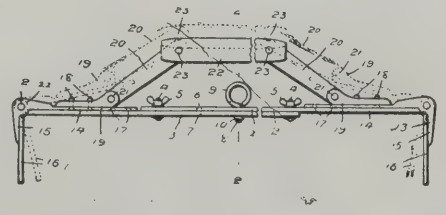
(*Also makers of Dayton Computing Scales and Hollerith Electric Tabulators*)

PATENTS FOR SALE

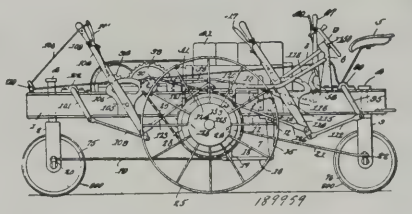
Patent applications through
Harold C. Shipman & Co.
Patent Attorneys - Ottawa, Canada



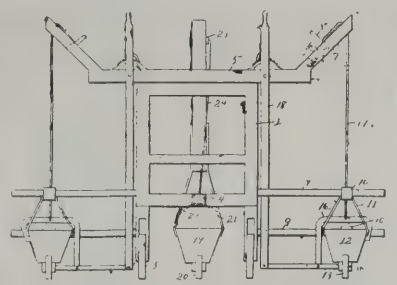
CENTRIFUGAL BRAKE MECHANISM.—Designed for use upon elevators, and is so arranged upon the cage as to be actuatable at a predetermined speed of rotation during normal movement of said mechanism; however, being so constructed that should the car travel at an abnormal rate of speed, gradually and automatically increases its speed and to cause an automatic brake device to be applied and set. Can. and U.S. patents for sale by Albert C. Cobb, Houston, Tex., U.S.A.



BRICK CARRIER.—Strong, durable and labor-saving device, cheap to manufacture and a necessity in handling bricks. Mr. Eugene D. Danielson, 229 Conn St., Buffalo, N.Y., offers patent rights in the Dominion for sale.

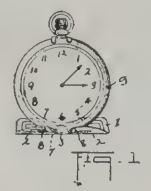


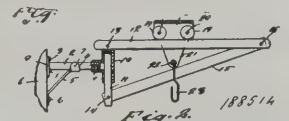
PLOW.—Which will go backwards along the field to be plowed without the necessity of turning at the end of the furrow, thus eliminating the time and labor now found in turning traction-driven plows and enabling the small farmer to use this modern labor-saving method of plowing. Can. patent rights for sale. Otto Hecht, Ridgeway, N. Carolina, U.S.A.



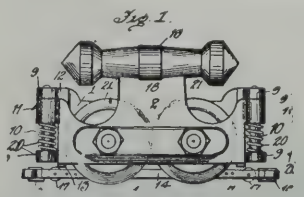
PLANTER.—New and improved form of planter, cheap to manufacture, strong, durable, and efficient in use, easily manipulated and should prove an attractive proposition to manufacturers. For full particulars apply to inventor, Gordon Warfield, 522 W. Saratoga St., Baltimore, Md. U.S.A.

WATCH EASEL.—For displaying watches or similar articles. Is constructed from a single sheet of flat spring metal, slitted or cut so that all portions bounded by said slits and cuts may be bent to provide spring means for effectively supporting a watch so that said member of easel may be returned to its position, thus providing a small compact bundle for shipment or storage. Can. patent for sale. John R. Palmer, 8 Leet St., Revere, Mass., U.S.A.



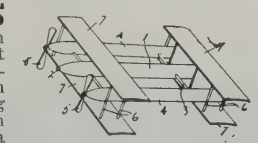


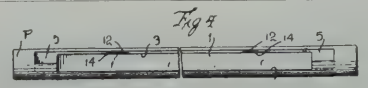
SUPPORT FOR SICKLE BLADES WHEN SHARPENING.—Will permit the blades to be moved freely across the face of grindstone and relieve the operator of the weight of the blade being sharpened. Can. patent for sale. Carl Lundgren, Cor. 6th and 7th Sts., Greeley, Ohio, U.S.A.



WALLPAPER TRIMMER.—Especially designed and adapted for cutting pasted paper in an even, rapid and cleanly manner, and is also adapted for use in either right or left hand and for guiding with ruler or other support in such a manner as to obviate any liability of casual

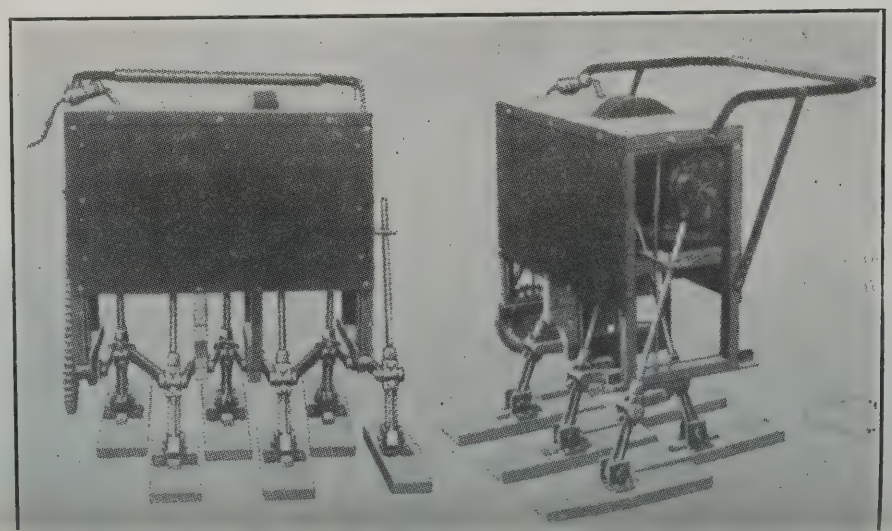
An **AERIAL TORPEDO** provided with wings so that when discharged from a projecting plane through the air at a high velocity into engagement with an object and then explode, insuring accurate and steady flight thereof. Can. patent for sale. Edward H. Hughes, 1639 Garfield Ave., Canton, Ohio, U.S.A.





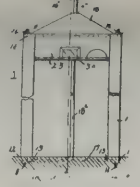
CURTAIN POLE having means whereby curtains or other drapery may be readily and effectively engaged with the pole without the necessity of employing pins or other members which would injure the fabric. It is cheap to manufacture and should prove an attractive proposition, as it is a domestic essential. Can. patent rights are for sale by Mr.

SILAGE TAMPER.—This article is attached to the distributor pipe which discharges the fodder immediately in front of the machine in a manner mixing the heavy and light parts effectually. The speed of the machine is fast enough to firmly pack each ton of fodder at least four times with a thump equivalent to a weight of 150 pounds falling from a height of 9 inches. This machine can be used in any silo. By the firm packing procured the settling is reduced to a small degree, so that it is not necessary to refill. Canadian patent rights are for sale by Dr. D. Sauerhering, Wausau, Wis., U.S.A.

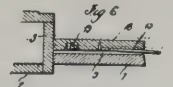


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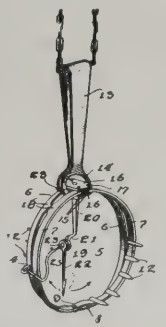
ticularly for use by traffic policemen. This article will effectively protect the officer from rain and sun from both sides and above. Can be quickly adjusted to different heights to suit user. Canadian patent for sale. Elizabeth A. Hashberger, Schuyler, Neb., U.S.A.



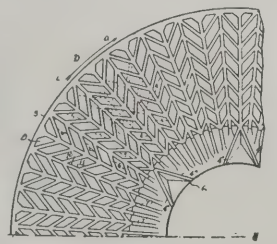
WEATHER STRIPS.—Providing an air-tight connection between the door and the door-frame, and at the same time allows the door to move to an absolute closed position and proper registration between the lock of the door and the keeper plate. Can. patent rights for sale by Alonzo E. Decker, South Prospect Street, Fremont, Ohio, U.S.A.



TRAP constructed of few parts, will not become out of order, strong, durable, simple and cheap to manufacture. May be readily set and baited and will instantly kill when sprung. This article will fill a long-felt want and should prove an attractive proposition to manufacturers. Can. patent for sale. Anders J. Ahlenius, Meadowlands, Minn., U.S.A.

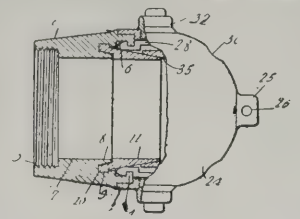


GRINDING PLATES for MILLS, particularly adapted for feed and corn mills, comprising a series of radial ribs and a series of differently inclined cross-wise ribs connecting the same, thus securing the most effective action upon the material. Can. patent for sale. Joseph H. Heishman, Lancaster, Pa., U.S.A.

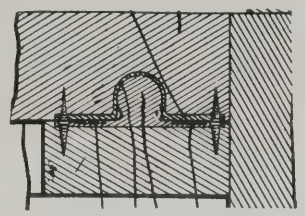




LOOSE LEAF BINDER that may be freely turned to permit inspection or making entries and so that the leaves will be held firmly, smoothly, evenly and perfectly flat. Can. patent rights are for sale by Mr. Ben. J. Pott, care of Ge. D. Barnard & Co., Vandventor & Laclede, St. Louis, Mo.

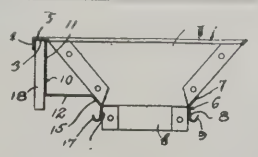


QUICK DETACHABLE COUPLING.—This article is strong, durable, easily manipulated and can be relied upon. Can. patent rights for sale. R. H. Martin, P.O. Box 227, Gainesville, Ga.

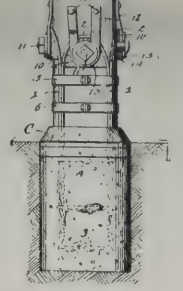


DOOR HOLDING MEANS for holding spring-actuated door in closed position, composed of a magnetic ball or head adapted to be attached upon the door frame or jamb and a socket carried upon the swinging edge of the door, composed of material that is responsive to the magnetic attraction in the member of part carried on the door jamb by which the swinging door will be drawn into closed position when it is swung within the radius of the power of the magnet. Can. patent for sale. Charlotte Hinchey, 72 Herkirmer St., Buffalo, N.Y.

BAG HOLDER.—Simply constructed, strong and durable and labor saving device which is a necessity to every farmer. For further particulars apply to inventor, Mr. Mark W. Thompson, R.D. No. 5, Box 48, Vassar, Mich., who offers Canadian patent for sale.



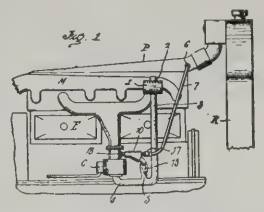
adapted to be seated in and to rise slightly above the ground, having means for detachably connecting a post or pole therewith above the ground without interrupting the position of the base. Patent rights for sale by Alfred Hollingsworth, Clarkston, Wash., U.S.A.



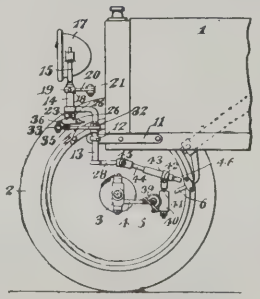


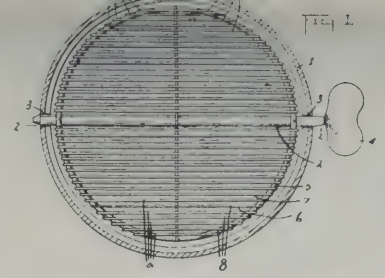
CORN SPOON having a cutting means for removing corn from the cob, which should prove a good seller and an attractive proposition to manufacturers. Can. Patent for sale. Capt. John J. Lieb, 1,000 S. 4th St., Louisville, Ken., U.S.A.

INTERNAL COMBUSTION ENGINE ATTACHMENT readily applied to most types of engines. Now employed in motor vehicles. The attachment vaporizes hot water taken from the radiator and supplies same to the mixture flowing from the carburetor to the cylinders, hot air drum attachment to the exhaust being used. Can. patent for sale. Elmer E. Hand, Walton, N.Y., U.S.A.

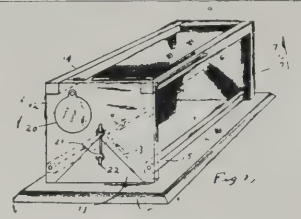


DIRIGIBLE HEADLIGHT.—May be easily adjusted to automobiles of different makes, easy to operate and adjustable to vary the angular movement or throw of the lamps when they are actuated by the steering gear, and will not interfere with the spring action of the auto. Canadian patent for sale. C. R. Stenberg, Genoa, Neb., U.S.A.

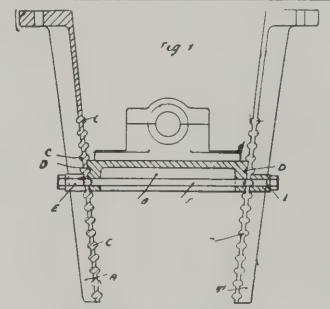




STOVE PIPE SPARK ARRESTER, to be pivotally mounted in the exhaust pipe of a stove or furnace for obstructing and retarding the flying sparks and cinders so that they will be prevented from escaping, while the device will permit the smoke and gases to freely pass through the pipe. Patent rights for sale. Emil Zimmerman, Butternut, Wis., U.S.A.



FLY TRAP for the extermination of one of our greatest Canadian pests and disease carriers, the fly. This article is cheap to manufacture and thoroughly efficient in use. Can. patent for sale. T. F. McDonough, Jr., Glen Cove, P.O. Box 161, Long Island, N.Y.



HANGER FOR SHAFTS.—This article is strong, durable and adaptable for very many different purposes. This hanger can be placed in many different positions. It is without doubt a boon and time-saver, requiring no skilled knowledge, nor has it any parts which require special adjustment. Can. patent for sale. Thos. Woodhead, 101 Water Lane, Leeds, Eng.

Manufacturers—Let us know what line of patents you are interested in, so we can send you copies from time to time.

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Plans for the 1920 British Industries Fair

Scope of the Fair has been Considerably Extended—Canadian Manufacturers will be Eligible as Exhibitors—Good Opportunity will be Afforded to Stimulate Export Trade with Great Britain and Other Countries of the World

By F. W. FIELD

British Government Trade Commissioner in Ontario

THE attention of Canadian manufacturers is directed to the opportunity which will be afforded by the British Industries Fair, 1920, for stimulating export trade not only with Great Britain but with many other countries throughout the world. According to a memorandum issued by F. W. Field, British Government Trade Commissioner in Ontario, the scope of the fair will be considerably extended.

"The arrangements so far," says Mr. Field, "make it probable that there will be sufficient space for the manufactures of suitable Dominion firms to be included. The fair is confined to British manufacturing firms, and the definition of a British firm, in this instance, is a firm whose principal works and head offices are situated within the British Empire and which is not controlled by foreign interests. Canadian manufacturers, therefore, coming within that definition, will be eligible as exhibitors.

"In order to assist manufacturers who have no British representatives to arrange for the erection of their stands, my Department (Department of Overseas Trade, Development and Intelligence) will undertake the work on their behalf, but it will be necessary for firms who have no representatives to pay in advance not only 2/-, in the case of the fairs held in London and Glasgow, and 3/6 in Birmingham, per square foot of floor space applied for; but, in addition to the above, 3/- per square foot for the erection of their stands. For example, a firm making application for 100 square feet at London or Glasgow, would have to pay in advance the total sum of £25, whereas a firm requiring 100 square feet at the Birmingham Fair would have to pay £32:10:0.

"Not only do the Department reserve to themselves the right to allot space in any position, but also to allot any less amount than that for which applicants have asked. In the event of applicants applying and paying in advance for more space than can eventually be allotted to them, the difference will of course be refunded.

"For the coming fair in London the Department has been so fortunate as to secure the Crystal Palace, the largest exhibition building in the world.

The schedule of trades of the British Industries Fair at London, Birmingham, and Glasgow, is as follows:

GLASGOW.

Textiles of all descriptions.
Ready-made clothing, including hosiery.
Hats and caps.
Boots, shoes and gloves.
Carpets and upholstery materials.
Foodstuffs (prepared and preserved) and beverages.
Chemicals (light and heavy).
Domestic chemical products.

LONDON.

Cutlery.
Silver and electro-plate.
Jewellery, watches and clocks.
Imitation jewellery, including hard haberdashery articles.
Glassware of all descriptions.
China and earthenware.
Paper, stationery and stationers' sundries.
Printing.
Fancy goods, including travelling requisites and tobacconists' sundries.
Leather for the fancy goods, bookbinding and upholstery trades.
Brushes.
Toys and sports goods.
Scientific instruments.
Optical goods and spectacle ware.
Photographic appliances and requisites.
Drugs and Druggists' sundries.
Musical instruments.
Furniture (knock down for export).
Art needlework requisites.

BIRMINGHAM.

Lighting fittings for electricity, gas, oil, etc.
Cooking stoves and utensils, including aluminium, enamel-ware, etc.
General hardware, including builders', marine and household ironmongery of all descriptions.
Tools (hand) of all descriptions and small machine tools.
Metal furniture for house, shop, office, garden and camp use, including bedsteads.
Perambulators, mailcarts and push-chairs.
Nautical instruments.
Firearms.
Fishing rods and tackle.
Machinery belting of all kinds.
Indiarubber goods for industrial and household purposes.
Motor-cycles and cycles.
Accessories for motor-cars, cycles and aeroplanes.
Weighing and measuring appliances and instruments.
Sanitary appliances.
Paints, colours and varnishes and painters' requisites.
Tubes in copper, lead, brass and steel, and pipe fittings.
Architectural and ornamental metal work, including gates and fencing.
Ropes of steel and hemp, cordage and string.

"The three fairs, though held in different cities (London Birmingham and Glasgow), are in reality one fair. They are held concurrently, each fair representing a specified group of industries, and no one industry being permitted to exhibit at two fairs. It is anticipated that there will be several thousand exhibitors at the 1920 Fair in London alone. There is also every reason to anticipate that several thousand overseas buyers will visit the fair.

"In view of the fact that admission to the fair is confined to trade buyers only, the general public not being admitted, it is satisfactory to be able to record that about 15,700 different visitors entered the fair during the eleven days it was open this year, and between them placed orders amounting to close on £2,000,000.

"The British Industries Fairs are not exhibitions. They are trade fairs to which admittance is restricted to *bona-fide* trade buyers seriously interested in the participating trades, and admission is by invitation only.

"The fair will be open on Monday, 23rd February, and close on 5th March.

"Copies of the regulations and full particulars with regard to the coming fair, as well as catalogues of the fair just held, may be seen at the offices of the British Government Trade Commissioners in Canada. Applications for space from eligible manufacturing firms in Canada can be received only through the British Government Trade Commissioners in Canada, as follows:

Montreal, 367 Beaver Hall Square (G. T. Milne, O.B.E.).
Toronto, 260 Confederation Life Bldg. (F. W. Field).
Winnipeg, 610 Electric Railway Chambers (L. B. Beale).

"Applications for space by *Ontario* manufacturers should be made through the British Trade Commissioner's office at *Toronto*, at the earliest possible opportunity, as applications sent through this office must be in London in the comparatively near future."

Use of the Metric System in Export Trade

(*Concluded from page* 79).

in Texas, in which states those units are to-day the common units of land measure. Another example is found in France where, in some sections, the old units of land measure are still predominant.

When outlying districts are incorporated within city limits, parcels of land are much reduced in size and smaller units come in. This gives an opportunity for the introduction of the metric system, but with the result that in the older portions of the town the old units are used, while in the new portions we find the new ones.

Similarly, initial surveys of the hinterland give an opportunity for the use of new units, but again with the result that the older portions of the country are measured in one set of units and the newer in another. Thus does the "adoption of the metric system promote 'uniformity.'"

In Uruguay, where the laws are more severe and more rigidly enforced than in any other country, it has been found necessary to authorize the use of old units for the measurement of land while in other countries the laws, in this application, are quietly ignored. This is the more significant because all transfers of real estate, as matters of public record, come before the eyes of officers of the law. In other countries, again, the purchase and sale are made in Spanish units and the day is then saved by inserting metric equivalents in the documents of record. This is called "using the metric system."

Only complete ignorance of history as well as of principles can lead anyone to urge a change in units of land measurement.

In marine measurements and sea shipments, the English system is used everywhere, although mixed with metric units, especially for inland navigation.

Classified in another way, the most used metric units are those of capacity. Next come those of weight, and, trailing far in the rear, those of length and their correlatives of area. This is in accordance with a law which long ago made itself apparent.

In view of the above facts, which are beyond doubt or question, how much respect can the reader have for those who tell us that "In export trade we have no choice—we must come to the metric system"; how much for those who say "They have forgotten their old units"; and that "Our units are meaningless to them." Is it not clear that such statements do nothing but demonstrate the ignorance of those who make them?

When reflecting upon these facts, please remember that the "adoption" of the metric system in these countries was begun more than half a century ago—most of these countries having begun the experiment between 1850 and 1860.

Change in Express Hours

Express Companies Reduce Hours of Men on Vehicles from Ten to Eight Hours

The following letter, of interest to manufacturers, has just been received from Mr. C. N. Ham, Secretary, the Express Traffic Association of Canada:

"The men on the vehicles of the Express companies have been serving you during ten actual working hours, exclusive of the meal period.

"For the purpose of improving the working conditions of their employees and to accommodate what seems to be the general public sentiment, the express companies have adopted the eight-hour day. To give the employees the benefit of the shorter day, it has been necessary to rearrange the hours for collection and delivery service.

"Effective June 1st, 1919, collection and delivery by the companies' vehicles will be confined to the hours between 8 a.m. and 5 p.m. Depot offices where night staffs are maintained will be open for the delivery of incoming shipments to consignees calling for them, and for the receipt of outgoing shipments which are not ready when last vehicle call is made.

"Will you please inform your members promptly of the new arrangement and of the necessity for it.

"Shippers who receive regular calls from express companies should arrange to have their packages ready at least one hour earlier that at present.

"Shippers who do not receive regular calls and by whom requests for service are telephoned to the express companies, should telephone their calls as early in the day as possible.

"We hope for the co-operation of your Association and its members in our efforts to give an efficient service."

Steamship Service

Space Available for Commercial Traffic Will be Very Small During Month of June

The situation in regard to available space for commercial traffic on ocean vessels, particularly to the United Kingdom, has been given considerable attention by the Association, the Government and others interested. The difficulty has been entirely due to the requirements of the British Ministry of Shipping. For the past two or three months 70 per cent. of the dead weight space has been utilized by the British Ministry of Shipping. Effective June 1st, this amount was reduced to 50 per cent. However, contracts have already been made for practically all of the remaining 50 per cent. in which to ship meats and foodstuffs.

From this it will be seen that, regardless of the reduction in the amount of space required by the British Ministry of Shipping, the space available for commercial traffic in June will be very small. It is expected, however, that the bulk of last year's grain crop will have moved by the end of June. Therefore, about July 1st conditions in regard to space should be more favorable.

Ocean Rates. The question of rates, of course, depends entirely on the question of space and traffic offering, or, in other words, on supply and demand. Therefore, just so long as the available space for commercial traffic is inadequate to care for the tonnage offering, rates will undoubtedly remain high.

It might be well to point out that the Government is placing vessels as fast as possible in the different trades with a view of supplying more space. This space, added to that made available by reduction of the British Ministry of Shipping requirements, should assist in increasing the supply of space. Just as soon as steamship companies begin to compete for traffic, rates will undoubtedly decline.

A long list of industries, in which the use of oil burners has been found economical, efficient and time-saving, is furnished by the Canadian Hauck Burner Co., Limited, which has just established a plant in Port Hope to manufacture Hauck oil burners. These burners are used by many of the most progressive and prominent concerns in the Dominion, who have recognized the great advantages of oil over other fuels. Oil is steadily replacing charcoal, coal, coke, wood, etc., in many industries because the cost is lower; the heat is clean, free from smoke or soot and, on account of complete combustion, free from ashes; the necessary heat is secured in the quickest possible time and can be maintained regardless of atmospheric conditions.



Consider Them As an Investment

Consider these new "Office Specialty" Counter Height Filing Sections in the light of an investment that pays you real dividends in actual money saved.

In the first place "Office Specialty" Counter Height Filing Sections serve all the purposes of high-grade filing cabinets. And in addition they combine the function of an office counter. That's where your first dividend comes in—you save, in first cost, the price of a counter.

On top of this there's your dollar-and-cents saving represented by the floor space conserved. And at the prevailing rate of rentals this saving means quite a repectable figure on your bank balance.

COUNTER HEIGHT SECTIONS

If this were all the service these Counter Height Filing Sections performed you would even then be getting double value for your money.

But they do more.

They act as department divisions in an office when stacked together as shown in the illustration.

Any record in his department is available to the executive in half the time it would take the filing clerk to walk to the filing room.

So besides the known savings they effect in space—and consequently money—they enable your clerks to get papers and records for you quickly—they save your time and the time and energy of your staff.

Tell your stenographer to type a memo today for descriptive folder "The Conservation of Space in Your Office." It's free.

958

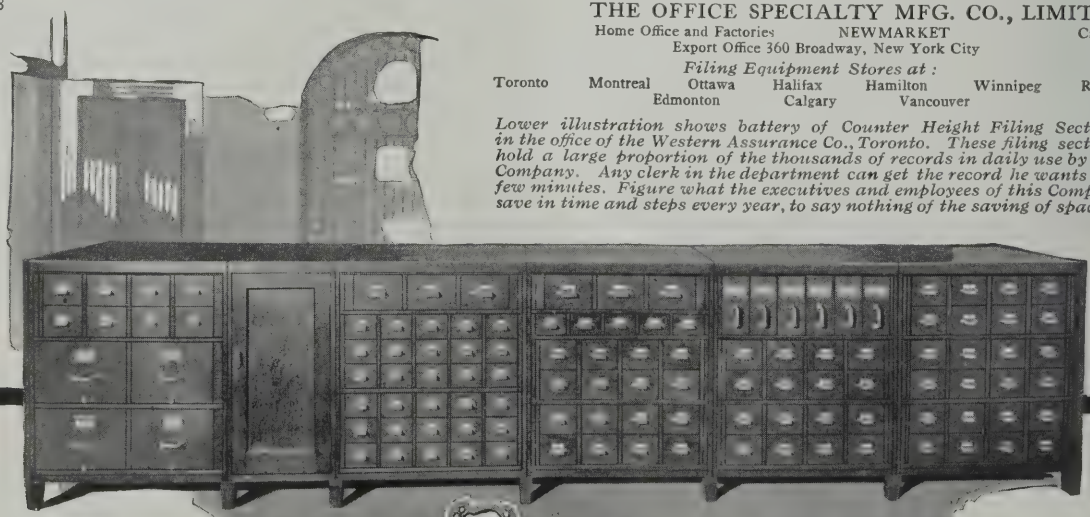
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Lower illustration shows battery of Counter Height Filing Sections in the office of the Western Assurance Co., Toronto. These filing sections hold a large proportion of the thousands of records in daily use by this Company. Any clerk in the department can get the record he wants in a few minutes. Figure what the executives and employees of this Company save in time and steps every year, to say nothing of the saving of space.

OFFICE SPECIALTY

LABOR SAVING OFFICE DEVICES — TIME IS MONEY

FILING SYSTEMS

OFFICE AND FINANCE

Bookkeeping and a Bookkeeper's Requirements

By PHILIP E. KUNTZ

(Reprinted from the "Manufacturer's News")

BOOKKEEPING is of two kinds; single entry and double entry. Single entry bookkeeping is practically obsolete. n its operation but one book is required, commonly called a lay book or blotter. The manner in which this book was kept depended very much on the orderliness of the person handling it. Both purchases and sales were recorded in chronological order, no distinction being made for either. The amounts may or may not have been extended into the olumns, provided it contained columns. Sometimes the mounts were added and again not. If they were added, the nformation was of little value, since it contained both purhases and sales, salaries, wages and expenses. No trial alances were taken, as such a thing was unknown. When ayments were made for either purchases or sales, it was ecessary to run through the book and find the proper entry n order to check with a mark denoting "paid," or to note he word paid, with or without the date, and the amount. In he early days no ledger accounts were kept, but at this eriod it marked the point at which double entry bookkeepng was making its innovation. It can be seen that there as no check on the cash, and the opportunities for disonesty were great. As to whether or not dishonesty was reater in these early days than now, very few of the present eneration can recall.

Evolution of Double Entry

At the time single-entry bookkeeping was the only known ethod of keeping books, single proprietorships and partnerhips were most numerous, and the country boasted of no uch huge industrial concerns as we have to-day. More sysematic and orderly arrangement of the accounts was necesary as the size of the concerns grew and corporations began o take the place of single proprietorships and partnerships t was impossible for one person to make the voluminous ntries, so more than one blotter or day-book was started. edger accounts must have been opened with each customer, nd separate books for cash opened, perhaps one for receipts nd another for disbursements. Monthly statements, somehat in the form of a trial balance, must have made their ppearance, and the merchant or manufacturer who received uch princely documents once a month was worshipped by ie business world. Business men were more secretive in ose early days than at the present time. Industrial assoations, commercial associations, manufacturers' associaons and boards of trade were doubtless unknown, and if ie thought occurred to organize such associations they reeived very little welcome because of prejudice and distrust. he secrets of business were too sacred to hazard discussion. ause a moment and think of the state of mind these pioneers ould be thrown into to see business men to-day exchanging leas with all their cards on the table, mutually helping one nother in an endeavor to eliminate cut-throat competition!

The history of double entry bookkeeping has been traced an Italian, Luca Paciola, in 1494, who, upon seeing the ifficulties of business men keeping accounts of their businesses upon clay fashioned into bricks and baked, a method originated by the Egyptians, and the more modern single entry blotter, originated a debit for every credit and *vice versa* on the algebraic equation. Almost every book on modern accounting published devotes a part of its first chapter to early bookkeeping methods and gives a more accurate and reliable hisory than I can in this hasty sketch. Bookkeeping was to be learned only in a business; there were no schools or business colleges, but with the demands for employees having a knowledge of bookkeeping, private instructors sprang into existence who developed what has now become the business college. They did pioneer work, but their mills ground too rapidly, with the result that many persons unfitted to keep the accurate detail required were forced into the business world. The method was to divide bookkeeping into four sections, with subdivisions of accounts, to keep a record of each class of detail desired. The principal sections were known as Proprietors' accounts, Speculative accounts, Resource accounts and Liability accounts, or some terminology similar thereto. The speculative accounts are commonly known to-day as the nominal or expense accounts. Statements were sent out monthly, and anyone capable of keeping such an orderly set of books was looked upon with the highest degree of respect. Many of our pioneer business men can trace their industrial careers back to the days of their keeping books, and it is said that John D. Rockefeller once kept books. It is generally considered that he is the richest man in the world. The bookkeeper of thirty or fifty years ago was correspondent, credit manager, sales manager, office manager, and practically all power was centred around him, since he knew more of the details of his employer's business than the proprietor himself. Why should he not? The high degree of respect which the bookkeeper enjoyed was doomed to lose its lustre, and to-day the bookkeeper enjoys (or rather suffers) less respect in many instances than the office boy. To-day in many instances he is miserably underpaid for what is expected of him, and his remuneration is not on a par with a coal teamster, perhaps due to his wearing a white collar and enjoying the comforts of a warm office in winter or a cool fan in the summer. Faithfulness, reliability, accuracy and general knowledge of the business are frequently looked upon as of little value. If business is good, and his work is heavy, he is called upon to remain late at night to keep up with his work or to get out special reports, of which there are many in these strenuous times.

Business Man's Knowledge

Most business men's knowledge of bookkeeping is so meagre and unreliable that it is dangerous. Very few know that if they made 25% profit on the cost of goods sold it means but 20% profit on sales, and of course at the end of the year they expect their profit and income account to show a gross profit of 25%. Since they are unable to find it, their suspicion is too often directed to the bookkeeper. It would be interesting to know how many business men could

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Total Assets - $489,271,197

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HEAD OFFICE - TORONTO

find the present worth of a note due in sixty or ninety days bearing 6% interest. It is generally believed that if there are 10% of the business men who have a pretty good knowledge of bookkeeping they have been rated very high; but how many of this ten per cent. can identify a trial balance, a manufacturing statement, a trading statement, a profit and income statement, or a balance sheet if the titles were left off? Since they are unable to identify such statements, what is their hope of making them up? Nevertheless, the business man must dictate to the bookkeeper and tell him how to make entries that are grossly erroneous and costly in view of the present income and excess profits taxes. The great regret is that they don't dictate more and then learn when an accountant is called in that their income taxes are so high because of their not allowing the bookkeeper to use his knowledge when he knows better. The facts should be presented to the bookkeeper and the purpose that is desired to be accomplished. This will prevent the doctoring and reversing of entries at some future time. Many bookkeepers are not much better qualified. I have had occasion to make inquiries as to what is the difference between bank discount and true discount, and I can not recall as many as five who knew that there is such a thing as true discount. Similarly the equation of accounts.

The Bookkeeper's Requirements

The requirements of a bookkeeper depend largely upon the nature and the size of the business for which he is to keep books. The eighteen-year-old bookkeeper with a common school and business college training capable of earning $15.00 a week, is not capable of opening a set of books. He will present a ready-made stock article taken off the shelf for which he has been granted a diploma (mulcted out of $10.00) as credentials of his fitness. His classifications of accounts is not adapted to the business for compiling the data that will be helpful to the concern. He will dump all raw material, supplies and labor (like so many clay bricks) into what is called a manufacturing account, and all selling expenses into another account called "Selling," in both of which is hidden a mass of data that will safely guide a concern through many a troubled sea. Such accounts serve the purpose of striking a monthly trial balance, but they are poison gas for the business man requiring statistical data. The bookkeeper must have an accurate knowledge of the statistical requirements of a business; sales, manufacturing and general. He must have imagination, foresight and love for figures and detail to solve knotty problems from which others shrink on account of the labor and thought involved. His knowledge of the intricate details of the business will grow in proportion as he is willing to apply himself in his endeavor to solve them. Such a bookkeeper will make himself invaluable, and if his services are appreciated, he has an excellent opportunity of becoming a partner or a stockholder in the business. With few exceptions, employers are always willing to assign work to others who are capable of doing it, and here lies the bookkeeper's opportunity of getting out of routine detail. One will always be a mediocre bookkeeper and an assembler of routine detail so long as he persists in doing nothing more than he is told. The opportunities for a bookkeeper to grow in these days are manyfold better than they have ever been for becoming an accountant if he will apply himself, either by home study of higher accounting or by attending one of a number of schools teaching commerce.

Canadian Cottons, Limited

Big Increase in Profits for the Year ended on March 31st last

Manufacturing profits of Canadian Cottons, Limited, for the year ended March 31, 1919, amounted to $1,365,103, as compared with $926,615 in 1917-18, and $593,272 in 1916-17 The sum of $15,000 was credited to reserve and $400,000 to depreciation, while $200,000 was set aside to finance changes in power plants. The balance represents 19 per cent. on the common stock, as compared with 14.6 per cent. a year ago. After all deductions, including a 6 per cent. dividend on common, there remained a surplus of $35,783 to carry forward, bringing the total surplus up to $2,228,893.

The balance sheet shows some very interesting details as to industrial conditions in connection with the company. The inventory has been reduced from $2,496,309 to $1,348,077 during the year. Part of this is due to the decline in the value of textile lines during the past month, which was allowed for in making up the inventory, with a further allowance, doubtless, for any future reductions in prices should these be necessary. At the same time the prevailing prices, although greatly reduced one month ago, are, on the average, above those of one year ago. The real meaning, therefore, in the lower inventoried value is the fact that stocks of raw cottons, yarns and fabrics have been cut down as compared with last year. This is in accordance with the policy of the textile companies at this time, when future prices of all of these lines must be regarded as uncertain, and when buying is much less in bulk than at a time when the supply was limited. The item of raw cotton in the total has shrunk from $1,415,797 to $473,021.

Bank of Montreal

Effect of Acquisition of Bank of British North America Exhibited in Six Months' Figures

The half-yearly statement of the Bank of Montreal, to April 30th, 1919, is the first report of the larger banks to be published since the signing of the armistice. This year the Bank of Montreal statement is also of particular interest, because it is the first statement that discloses the position of the bank following on the absorption of the Bank of British North America. As a result of this important acquisition the Bank of Montreal now has a paid-up capital of $20,000,000 and a rest of $20,000,000, making, in all, total capital resources of $40,000,000.

As was well known throughout the period of the war, the resources of the leading banks of the country were to a great extent placed at the disposal of the Government for the handling of special war business. The half-yearly statement of the Bank of Montreal indicates that since the signing of the armistice there has been a gradual adjustment of these special accounts, and the banks are gradually getting back to the normal lines of business undertakings.

On this account there is a substantial gain in current loans, as compared with a year ago. This is all the more remarkable when it is remembered that for some months past many of the larger industries of Canada have not been working to anything like capacity and for this reason their requirements are away below normal. There would seem, however, to be a steady gain in general business throughout the country and every facility is being given to the development of export trade.

The profit and loss account also indicates the manner in which the various adjustments have been made in the rest

THE ROYAL BANK OF CANADA

Capital Paid Up	$14,000,000
Reserve and Undivided Profits	15,500,000
Total Assets	427,000,000

HEAD OFFICE - MONTREAL

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A good banking connection is an essential to the success of the manufacturer or merchant.

THE CANADIAN BANK OF COMMERCE

HEAD OFFICE - TORONTO

Capital, $15,000,000. Reserve Fund, $15,000,000
Total Assets over $440,000,000

account and the special appropriations provided for out of the profits for six months. The net profits for the half-year to the end of April amounted to $1,751,237, which compares with $1,287,587 in the corresponding period a year ago. The amount brought forward at the end of the last accounting period was $1,901,613, and premiums obtained on new stock amounted to $3,500,000. These totals brought the amount available for distribution at the end of the six months' period up to $7,152,850. Four million dollars was credited to rest account, and after providing for dividends, etc., $1,661,614 was carried to profit and loss.

The principal accounts as of April 30th, 1919, and April 30th, 1918, compare as follows:

	April 30, 1919.	April 30, 1918.
Total Assets	$489,271,197	$426,322,096
Liquid Assets	293,980,708	291,624,073
Current Loans and Discounts in Canada	157,683,463	100,294,678
Call and Short Loans in Great Britain and United States	76,653,440	96,584,365
Dominion Notes	54,107,243	60,457,838
Gold and Silver Coin	24,743,935	20,931,133
Deposits bearing Interest	268,167,111	247,904,855
Deposits not bearing Interest	124,736,111	109,851,949
Profits for the Six Months	1,751,237	1,287,586
Capital Stock	20,000,000	16,000,000
Rest Account	20,000,000	16,000,000

Amherst Pianos

Net Profits for the Year were $44,009, after Deducting Expenses and Charges

Amherst Pianos, Limited, Amherst, N.S., enjoyed a trading profit during its last fiscal year of $97,745, and after deducting expenses and charges, a net profit of $44,009.

The statement of assets and liabilities shows $347,887 for real estate and buildings at Amherst and branches, and goodwill, machinery, plant and equipment is $24,743, and reserve for depreciating, $2,968. Current assets are set down at $289,198 for accounts and notes receivable, $84,536 for inventories of materials on hand at the factory, and $50,484 at branches. Liabilities show $217,852 in bank loans, secured by assignment of accounts receivable, and on accounts and notes payable.

The surplus at the end of the company's year in 1918 was $49,319, which with the profit for the present year, makes a total of $93,319.

Imperial Bank Expands

Substantial Growth in Profits and Large Increase in Deposits During Past Twelve Months

The forty-fourth annual statement of the Imperial Bank of Canada for the period ending April 30th, 1919, is satisfactory from every standpoint. Net profits showed an increase over the favorable record of the previous year, aggregating $1,247,516 as compared with $1,185,066. $500,000 was added to reserve fund account, bringing the total reserve up to $7,500,000, which is $500,000 in excess of the paid-up capital. The bank increased its holdings of securities, its deposits increased and it placed a larger volume of loans. Holdings of Provincial and Dominion Government securities expanded from $5,361,000 to $5,934,000, while Canadian municipal, British, foreign and colonial public securities held increased from $13,781,000 to $14,702,000.

Call loans outstanding at the end of April were almost double those of the year before, the total being $4,866,000 largely due to financing customers in connection with war



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loan subscriptions. The strong support given to the business enterprises of the country is demonstrated by the fact that current loans outstanding totalled $48,544,000, all in Canada, as compared with $40,302,000 a year ago. The bank's total assets amounted to $112,186,000, an increase for the year of over $10,000,000.

A substantial growth in deposits indicates an increase in the bank's customers. Current deposits expanded over a million and a half dollars to $21,486,000, while savings deposits grew from $55,478,000 to $61,712,000. This brought total deposits to $83,198,000, an increase of nearly $8,000,000.

The financial strength of the bank is well indicated by the fact that quickly realizable assets amounted to over $58,000,000 as against liabilities to the public of $96,610,000, a ratio of over 60 per cent.

Howard Smith Paper Mills

Shareholders Approve of Bond Issue to Extend Plant and Remove Indebtedness

An issue of $1,500,000 6 per cent., 15-year bonds for the purpose of extending the Beauharnois mill of the C. Howard Smith Paper Mills, Limited, and clearing off bank indebtedness was authorized at a recent meeting of the shareholders of the company. The Beauharnois mill makes a very high grade of paper, and business has been active. The company will double the capacity of the plant. The new Crabtree mill, which at the time of the annual meeting was not far ahead in orders, now has a supply for several months. The outlook for the company is regarded as quite bright, and it is felt that in a few months the common dividend of 8 per cent. will be resumed.

Making Them Shareholders

System Worked Out by a Massachusetts Industry to Help Employees to Save

A Thrift Club to encourage thrift, economy and savings among the employees by allowing them to loan their money to the company, and to provide opportunity for investment, has been established by the Hood Rubber Co., of Watertown, Mass., and its methods may prove of interest to Canadian manufacturers. The plan briefly is as follows:

Payments of one dollar or more by employees can be made on any business day. The company offers to the employees the opportunity to receive six per cent. on their money. All money received from employees will be used in the business of the company or will be invested in the preferred stock of the company. Such preferred stock will be held by a trustee under a declaration of trust for the benefit of employees holding receipt books.

Receipt holders whose receipt holdings are sufficient for the purpose may at the option of the company exchange their holdings for the Hood Rubber Company preferred stock. Such exchange will be based on the market value of the stock at the time of exchange. This feature creates an easy payment method by which employees are offered the opportunity of becoming stockholders, and thus sharing further in the prosperity of the company.

The administration of the Thrift Club is to be by the treasury department; and the office of the club is located in the factory payroll office of the company; and will be open on all business days between the hours of 8.30 a.m. and 5.00 p.m., for the transaction of Thrift Club business.

The Merchants Bank of Canada

Head Office, MONTREAL — Established 1864

Paid-up Capital	$ 7,000,000
Reserve Funds	7,437,973
Total Deposits (January, 1919)	132,000,000
Total Assets (January, 1919)	162,000,000

President: Sir H. Montagu Allan, C.V.O.
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Supt. of Branches and Chief Inspector: T. E. Merrett

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309 Branches in Canada Extending from the Atlantic to the Pacific.

UNION BANK OF CANADA

Established 1865 — Head Office, WINNIPEG

Paid-up Capital	$5,000,000
Reserve Fund	$3,600,000
Total Assets as at Nov. 30th, 1918, over	$153,000,000

FACILITIES for HOME and FOREIGN TRADE

With 341 branches in Canada, from Halifax to Prince Rupert, the Union Bank of Canada offers excellent facilities for the transaction of every phase of modern banking business.

In connection with export trade, attention is particularly drawn to the advantages offered by the Foreign Exchange Department of our London (England), New York and Montreal Offices, and Manufacturers and Exporters are invited to avail themselves of the Commercial Information Bureaus established at these Branches.

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Medicine Cabinets,

Everything for the Bathroom.

Write for Catalogue C and Price List.

Shoe Company Expands

The Perth Shoe Company, Limited, will shortly make an addition to their plant in Perth, Ont. In a statement to INDUSTRIAL CANADA, G. H. Ansley, vice-president and general manager, gives the following information about the company's plans:

"The addition will be 72 ft. long, 42 ft. wide, two stories high, and will give us a building about 300 feet by about 42 ft., two stories high. It will give us better office facilities, as we employ about fourteen people in connection with the administration.

"We are very much cramped in manufacturing and the addition will permit us to run between 600 and 700 pairs of shoes per day, an increase of 200 pairs over our present production.

"For general information, we manufacture women's Goodyear welted shoes exclusively, and I think have perhaps the most highly specialized shoe factory in Canada. Our claim to be the largest exclusive manufacturers of women's Goodyear welted shoe, I think, stands good, and it is a great business slogan.

"We employ about one hundred and fifty people, have our own athletic association, orchestra, gymnasium, baseball club, etc."

Proposed Empire Preference

The budget proposals in regard to a tariff preference in respect of products of the British possessions imported into the United Kingdom are as follows:

Duties on foreign spirits to be increased from 1st Sept. by an additional duty of 2s. 6d. per proof gallon on enumerated spirits and on other spirits in proportion.

Wine, the duties to be modified from 1st September, as follows:

	Empire Wines Per gall. s. d.	Other Per gall. s. d.
In cask, not exceeding 30*	0 9	1 3
In cask, not exceeding 43*	2 0	3 0
In bottle—		
Still, not exceeding 30*	1 3	2 3
Still, not exceeding 42*	2 6	4 0
Sparkling	2 6	3 9

Tea, Cocoa, Coffee, Chicory, Sugar, Dried Fruits, Tobacco, Motor Spirit — Duties on Empire products to be reduced by one-sixth, from June 1st in the case of tea, and from September 1st in the case of other articles.

Cinema Films, Clocks and Watches, Motor Cars and Cycles, Musical Instruments — Duty on Empire products to be reduced by one-third from September 1st.

Tractor Plants for Medicine Hat

According to the *Calgary Herald* a deal was closed in April whereby Messrs. Martin and Phillips will manufacture the Stinson tractor in Medicine Hat for the western Canadian trade, and the Alberta Foundry and Machine Co. will develop a new tractor to be known as the "Canadian." The firm of Martin and Phillips is well-known throughout Alberta, states the *Herald*. They drilled most of the gas wells at Medicine Hat and Bow Island, and have made a large proportion of the well-drilling machinery in use throughout the west. They have been interested in the tractor field for some time, and Mr. Martin just returned recently from a trip to Minneapolis, where the deal was completed. Previously he had spent five months in the United States looking over practically every tractor made, and he not only visited the various factories, but went out into the country and talked to farmers who were using the numerous makes. His process of elimination gradually brought him to the Stinson, and it was then necessary to make a bargain with the manufacturers. Together with Mayor Brown and Industrial Commissioner Kellogg, he induced Mr. Stinson to come to Medicine Hat, and he was so pleased with the possibilities that a deal was finally consummated.

The Alberta Foundry & Machine Co. will not be ready to produce their "Canadian" tractor for awhile, but Martin and Phillips expect to be making a "Stinson" a day after July 1.

Catalogues Wanted in Palestine

A request for catalogues reaches the Association from Palestine through the medium of the Canadian Mission in London and the Canadian Trade Commission in Ottawa. It is the opinion of the former that a good opening for certain classes of Canadian products is afforded in this market. Following is a statement received regarding the situation:

"The Chief Administrator, occupied Enemy Territory Administration for South Palestine, desires to obtain as many catalogues as possible upon numerous import lines, all of which should find a profitable market in Palestine. Facilities for inspecting these catalogues will be offered to interested parties in Jaffa, Haifa, and Jerusalem, and it is conceived that they will tend in no small measure to the replacement of enemy importation by United Kingdom goods.

"The main object is to draw enquiry; the question therefore of uncertain catalogue prices, he states, should not debar the sending of trade literature. Actual prices and delivery can be settled by correspondence with the manufacturers and gradual substitution of newer catalogues.

"Catalogues in the three principal languages of the country—English, French and Arabic, are much appreciated, and were a great feature in the German pre-war trade propaganda.

"The following are the principal imports required, and it is suggested that suitable firms should send their catalogues addressed to Headquarters, Economic Section, O.E.T.A., Jerusalem:

"Agricultural machinery and implements, flour mill installations, all kinds of motors, furniture, bedsteads, enamelware, pottery, glassware, lamps, stationery, musical instruments, typewriters, all kinds of tools, engines for petroleum and gas, perfumery, hardware, ironware, articles of construction, book-printing and book-binding machinery and types, boots and shoes, drugs and chemicals, brushes for painting, and household travelling bags and necessaries, locks."

Heavy Sheet Steel Goods

Catalogue No. 30 of the Steel Trough & Machine Co., Limited, Tweed, Ont., contains illustrated descriptive material about the various lines of heavy sheet steel goods made by this company. These include galvanized tanks for various purposes, steel shipping barrels, water troughs, cookers, chimney tops, culverts, chutes, sinks, baths, closets, lavatories, security boxes, evaporators, gasoline pumps, etc. Each line is thoroughly described and illustrated. Besides the goods catalogued the company makes many lines not shown and undertakes to produce sheet steel sundries for manufacturers that cannot be produced locally. The progress of this company from small beginnings ten years ago has been very creditable.

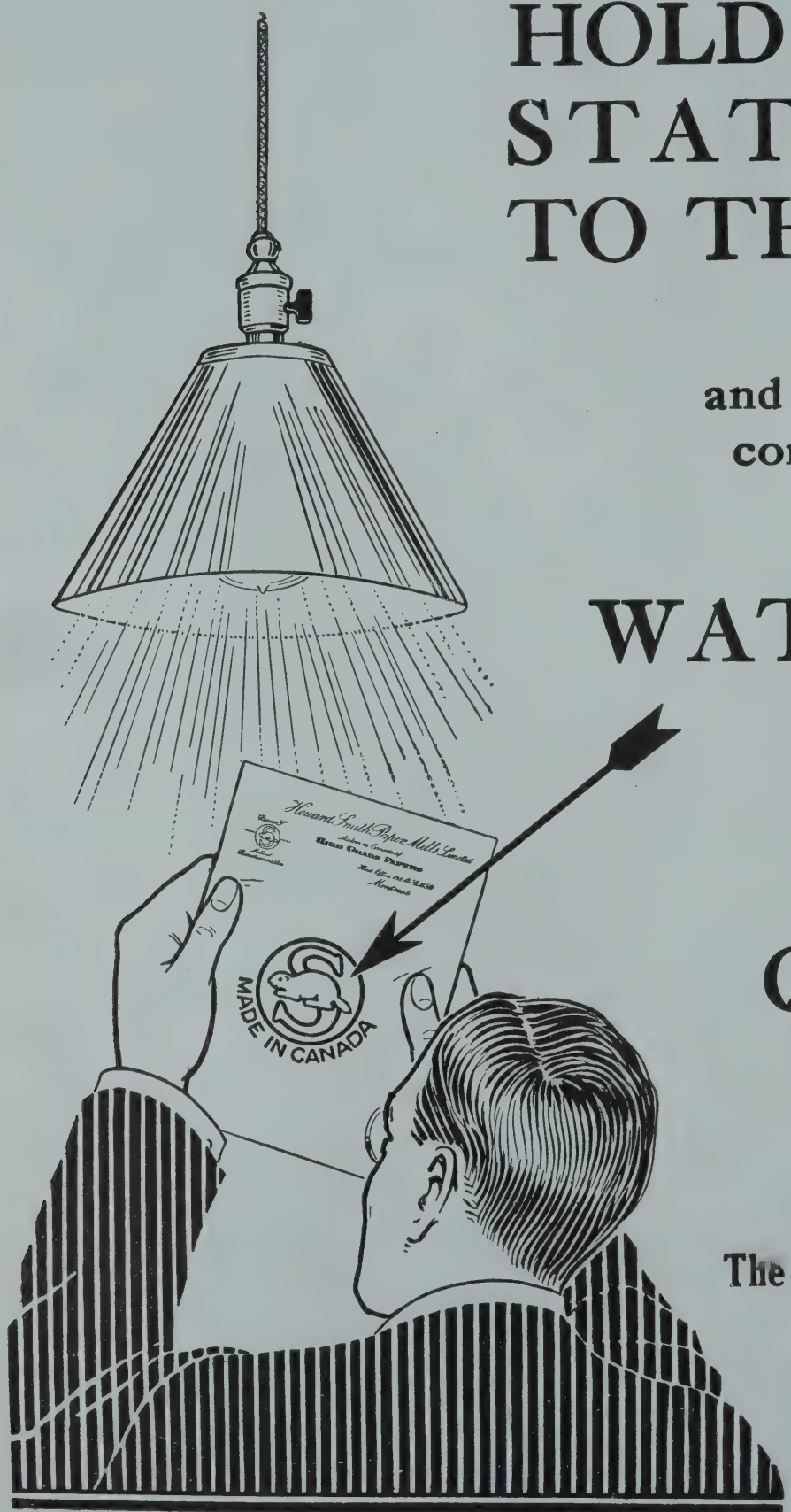
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The Position of Maple Sugar Substitutes

Because of Misrepresentation these Products have been Barred from the Market—Their Desirability as Food Recognized—If Properly Labelled they Should be Permitted a Free Sale, thereby Helping to Lower the Cost of Living

By L. J. ROGERS
Assistant Professor of Chemistry, University of Toronto

AXIOM.—*To refuse a market to any wholesome and desirable food, is to increase the cost of living.*

IT is not denied that, under special circumstances, an artificial increase in the cost of living may be justified. But the circumstances must be entirely exceptional; and, in the case of an intelligent democracy, should be fully explained to the consumer.

Is this the case with maple syrup and maple sugar? An amendment to the Adulteration Act makes the sale of any substitute for these articles, or any imitation of them, illegal. No one can deny that wholesome and desirable imitations of, and substitutes for these articles are possible. Why are they not permitted a market?

A Simple Statement of Matters

There are many different sorts of flour—wheat flour, buckwheat flour, rye flour, etc., but when we ask the grocer for flour, without specifying the kind, he understands quite well that we want wheat flour.

Nature furnishes many kinds of sugar—cane sugar, milk sugar, fruit sugar, etc., but when we ask the grocer for sugar, not specifying the particular kind, he knows that we demand cane sugar. The proper name for this particular kind of sugar is *Sucrose*. Nature furnishes it in a great many plant juices, or sap. But there are only three plants which are worth while considering, when we regard the commercial article. These three plants exist so plentifully or are so easily cultivated, that it is found profitable to use them as sources for commercial sucrose. The three plants referred to are *Sugar Cane*, *Beets*, and the *Maple*. Because sucrose was first manufactured for commercial purposes from the *cane*, it came to be known as *cane-sugar*, and *cane-sugar* means the same as sucrose. But sucrose is a better word, because cane sugar implies that the article must be made from the sugar-cane, which is not true. The sugar that we get from beet juice and from maple sap is absolutely the same sugar which we get from the cane. Keep this in mind; and always speak of this sugar by its proper name, which is *Sucrose*.

Refining Processes Needed

But no plant juice furnishes sucrose only. In every sap, or juice, it is associated with other substances, and if we want pure sucrose, we have to employ what are called refining processes to separate the other substances. Simply boiling down the juice or sap will never furnish pure sucrose.

In the case of cane juice and beet juice, the other substances associated with the sucrose are such as give an unpleasant taste or flavor to the product of evaporation (called raw sugar). Hence we must of necessity *refine* the sucrose when we get it from these sources. But in the sap or juice of the maple tree, the associated substances have a pleasant taste and flavor, and we do not need to refine the raw sugar. Quite the reverse. By refining it we should lose the distinctive flavor of the maple, and obtain the pure, sweet sucrose, indistinguishable from ordinary granulated sugar.

It is most important to note that the only reason why we are willing to pay 30 or 40 cents a pound for maple sugar, while refined sucrose from the cane or the beet can be bought for 10 cents, is that we are willing to pay for the maple flavor. So far as the sugar itself is concerned, there is no difference whatever. Do not lose sight of the fact that the special value of maple sugar lies in its flavor, and in nothing else.

If then we could give the maple flavor to sucrose obtained from the cane or the beet, we should have an article absolutely identical with maple sugar, except in origin.

But we cannot get the true maple flavor, except from the maple tree. From guaiac wood, and some other sources, we can get a flavor that somewhat resembles that of the maple; but is quite inferior, as judged by most palates.

The true maple flavor, however, can easily be obtained from the maple sap; and, since the flavoring material increases in intensity as the season of sap production advances, it is found that the later runs of raw sugar are far too intensely saturated with this flavor, usually being so rank as to be unsaleable. This fact is quite well known to every farmer who makes maple sugar. Buyers in Canada and the United States have been for many years in the habit of buying sugar of the quality referred to, because they found that by dissolving it in a large excess of sucrose syrup, the sucrose being derived from cane or beet juice—they could give the maple flavor to the whole of the sucrose, and thus impart a sufficient flavor to three or four pounds of sucrose, from each pound of the raw sugar of the maple sap.

The Equal of True Maple Syrup

Of course the resulting sugar could not truthfully be called maple sugar—because most of its sucrose came from the cane or the beet. But, as far as food value is concerned, it was quite the equal of true maple sugar. And it could truthfully be named a mixture of the two sugars, or as sucrose flavored with the characteristic maple flavor. It met popular approval, as evidenced by the large demand for it; and only fell into disfavor because manufacturers, in their over-anxiety to secure a large market for it, offered it as maple sugar, which they had no right to do. Such misdescription fully warranted their punishment, and no right-thinking person, no intelligent consumer, will pity them.

But the article itself was a desirable food, and was an excellent substitute for the best grades of maple sugar, and could be manufactured to many times the extent possible with real maple sugar, made from the sap of the maple, and therefore restricted as to quantity by the amount of sap available.

Maple sugar (and syrup) is in demand throughout the whole of Canada; for that matter, over the whole American continent; and an increasing market for it is being developed in Europe. If the maple tree could be cultivated everywhere—or even extensively—the supply might increase

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The worth of our Service in the adjustment of losses has been demonstrated time and again, and has saved many thousands of dollars to manufacturers.

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Another satisfied customer writes us:

"Your service and material has been satisfactory for 1918 and we are very well pleased with both. You have at all times been able to give us the very best of castings and your service has been admirable.

We are only too glad to tell you this and hope that your other customers are as well satisfied as we are."

MAY WE EXPECT AN ENQUIRY FROM YOU?

McKINNON INDUSTRIES, LIMITED

St. Catharines, Ontario, Canada

with the demand. But the slow growth of the tree, and the limitations of climate, make this impossible. There are no producing maple trees in Alberta, Saskatchewan or Manitoba; and although some maples grow in British Columbia, the alternation of warm days with cold nights in springtime, which render possible the gathering of the sap in profitable quantity, is unknown; while in Ontario, the scattered maple trees furnish no more than a purely local supply. Many farmers are able to secure enough for their own tables, but production for commerce does not exist. The census of 1910 shows that of a total of about 10,500,000 lbs. maple sugar product in Canada, approximately 10,000,000 lbs. came from a limited area of Quebec—the so-called Eastern Townships and vicinity. Maple sugar is therefore a purely local industry; and any legislation which prevents competition with it enables a portion of the Province of Quebec to hold up the rest of the world for monopoly prices.

Discriminative Legislation

Surely, in the light of what has been said the consuming public has a right to protest against any such discriminative legislation. It has been shown that the special value of maple sugar is due to its flavor only. Let this be recognized, and let foods honestly flavored with the maple, and so labelled, have a free market. Even imitations of the maple flavor should be legalized, under the restriction that they are truthfully labelled, and make no claim to be actual maple products. No other course is consistent with fair play to the consumer. Nor is the rightful claim of the producer of maple products infringed. He is sufficiently protected by the special character of his goods, and by the Adulteration Act, which forbids false labelling, or misrepresentation of any kind. Nothing can be sold as maple sugar or syrup which is not actually such; but sugar and syrup flavored with maple, or imitations of maple sugar and syrup, truthfully sold as imitations, should be freely available to the public, being sold for what they really are.

Offers Representation

Experienced Agent is in Canada Looking for Connections with Canadian Manufacturers

An opportunity for Canadian manufacturers to secure representation in the old country is afforded by the presence in Toronto of Mr. James Arthur Brown, who is prepared to take on a number of lines on favorable terms. Mr. Brown is 38 years of age and has had fifteen years travelling experience both in the old country and throughout Canada. He is personally familiar with all the large commercial centres in England like London, Manchaster, Birmingham, and Sheffield. Mr. Brown is prepared either to centralize his work in London or else work from there. He invites correspondence from manufacturers desiring representation, and is prepared to interview any persons interested. At present he is making his headquarters at the Y.M.C.A., Toronto.



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BREAKDOWNS are expensive. They mean expenditures for repairs and loss of time, labor, and output. The success and profit of each day's operation depends very largely on the strength and endurance of the power transmitting and material — conveying Link-elt employed in your mill.



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We show a few of the various types of Link-Belt. Our catalog shows many more.

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It is your guarantee of service and satisfaction.

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Stock also carried at 1195 St. James Street, MONTREAL, Que.

Insuring Its Employees

Auto-Strop Safety Razor Company Adopts Plan Whereby It Insures the Lives of Employees

A plan, quite in keeping with the tendency of the times, is that just adopted by the Auto-Strop Safety Razor Co., Toronto, which has for its object the insuring of every one in the employ of the company.

Under the system, as explained by Mr. C. S. Stampleman, the general manager of the Canadian branch, the Auto-Strop Company undertakes to insure the life of each member of its staff and to pay all premiums in connection with such insurance.

The policies are graded in amount from $500 to $2,500, the value of each policy agreeing proportionately with the length of time spent by the recipient in the service of the company. Each employee is permitted to choose his or her beneficiary, and thereafter all responsibility in relation to the various policies is assumed by the Auto-Strop Safety Razor Company.

Manufacturing concerns are fairly numerous who have granted lately a shorter work day to their employees, but so fas as is known this is the first instance of an industrial organization in Canada insuring the lives of its members; although it is understood that the idea is more or less practised in the United States.

Offer Stock to Employees

How Swift & Co. are Encouraging their Employees to Become Shareholders

In making an issue of approximately $25,000,000 of new stock, Swift & Co., Chicago, are including employees as well as stockholders in their subscription offer. Under the plan adopted by the Swift directors the shareholders of record May 31, 1919, will be entitled to subscribe for one share of treasury stock to each five shares held on that date; the remainder of the stock in the treasury to be offered to employees at $100 a share on what will be known as the "1919 employees' stock-savings plan."

The plan has been evolved to encourage saving on the part of the employees and with the particular purpose of interesting in Swift & Co. stock those employees that are not now shareholders, especially the plant employees.

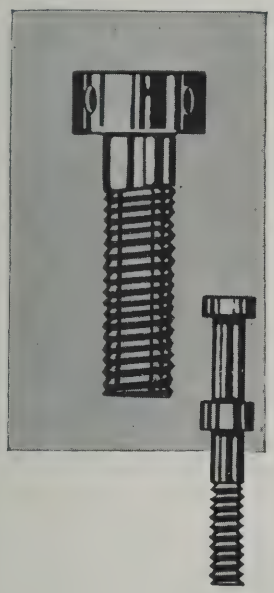
In order to participate in this plan employees must have been in the service continuously for not less than six months, but employees who have been absent with the colors are considered as being in continuous service. The amount of stock to be allotted to each employee will be fixed according to wages or salary, ranging from one to five shares. All employees of the company, both men and women, will be allowed the privilege of subscribing. It is estimated that approximately 10,000 employees will take advantage of this offer, which expires July 26, 1919.

Under the plan, the stock may be paid for by the employee on a basis of $10 a share down and a dollar a week per share, to be deducted from his salary. If the employee is paying for Liberty bonds, he may have shares reserved for him and not begin payment until after he has completed his Liberty bond payments.

The amount of stock to be allotted to each employee will be one share for those receiving up to $20 a week, two for those up to $30, three up to $40, four up to $50, and five over $50.

At the present time more than 5,000 employees of Swift & Co. are shareholders under a stock investment plan, which has been in operation for several years.

SHEET METAL STAMPINGS and AUTOMATIC SCREW MACHINE PRODUCTS



Government precision calls for work that is absolutely perfect in each detail. We have supplied that work, and our experts and modern machinery used in so doing now stand at our customers' disposal running with the same accuracy.

Years of experience have taught us how to discriminate in selecting our material so that the work produced is of the finest quality and workmanship, while our prices remain reasonable and popular.

We will be pleased to give you our estimate on your next order.

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CANADA
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BROCKVILLE, CANADA

Relaxation of Control

British War Departments and Board of Trade Abolish Control of Sale and Distribution of Commodities

The British Board of Trade announces that all control of the sale and distribution of commodities formerly exercised by the Admiralty, the War Office, the Ministry of Munitions, and the Board of Trade, has been abolished or will cease on May 31, with the following exceptions: Clinical thermometers; Egyptian cotton (to be continued until July 31); flax and flaxseed; fuel and gas; glass; hay and straw; leather and leather materials; partial petrol orders as to vouchers and returns; petrol; pitwood, potash, timbred; tongsten ores; torpenutine substitute; and wool, limited control of Australian and New Zealand wool. Restrictions on imports and exports are not covered by this announcement. Relaxation of control of importation of certain cereals recently announced by the Commission of Wheat Supplies has been interpreted wrongly as entailing a revocation of grain prices. An order of the Ministry of Food states that the grain prices order which fixed the maximum prices for home-grown cereals is not revoked. The maximum price for barley which may be paid by a person licensed to purchase is 70 shillings per quarter. Purchases for seed purposes have not been controlled since January 1, 1919.

New Industry for Hamilton

Hoover Suction Sweeper Co. of Canada, Limited, Decides to Locate at this Point

After considering the merits of various industrial centres, officials of the Hoover Suction Sweeper Co., of North Canton, Ohio, have decided to locate their new Canadian plant at Hamilton. Heretofore the Hoover Company has had a small manufacturing plant at Windsor, from which point its Canadian business has been handled, but this will at once be moved to Hamilton, and as the company now plans to go after the Canadian and export business aggressively, it is the intention to erect a big modern plant at once. In fact, the Canadian general and sales offices have already been moved to Hamilton, temporary quarters having been secured at 20 South MacNab street, to be used while their permanent manufacturing plant and offices are being erected in the east end of the city. A site with a street frontage of about 600 feet, at the corner of Gage and First avenues, has been purchased, and within a few days work will be started on a series of model factory buildings, which will be the last word in industrial construction and an ornament to the district in which they are located.

The Hoover people lay claim to being the oldest and largest manufacturers of vacuum cleaners and suction sweepers in the world, their plant at North Canton being a large one and employing an army of skilled workers. The plant to be erected in Hamilton will be so built as to permit of considerable additions and enlargements, as it is the company's intention to provide for not only the Canadian trade, but also its export trade at the Hamilton works. The company already has a sales organization in Great Britain, and arrangements are being made for the transfer of the export business from the American to the Hamilton plant.

In charge of the company's Canadian activities is Thomas F. Kelly, who for the past six years has been commercial manager for the Dayton Power & Light Co., Dayton, Ohio. Prior to that Mr. Kelly was sales manager for the Cataract Electric Light & Power Co., in Hamilton, and was prominently identified with Hamilton industrial, commercial and social activities.

ONE of the most appealing arguments to business men is economy in business operation and management. You believe in efficiency and economy in your plant and undoubtedly have it in most of your departments.

But, do these two vital factors apply to your Heating System? G.F.E. Hot Water Heating Systems have proved time and time again that their installation in place of antiquated heating systems have saved large amounts of money.

Large heating projects for industrial uses are one of our specialties. Over fifty years of successful experience in this sort of work have given us valuable practical knowledge which is invaluable to firms with heating requirements.

The advantage of a wide range of temperature possible with this hot water system through the easy regulation of water temperature to conform with temperature outdoors is a strong point in its favor. Add to this the low operating cost of the G.F.E. Hot Water Heating System and our broad experience in this field and the fact that our expert engineers will make a preliminary study of your own heating problems without cost to you.

Is it not worth your immediate attention? We feel sure it is and that an inquiry into this on your part will be well worth the time involved in dropping us a line to-day,—now.

Canadian General Fire Extinguisher Company, Limited

TORONTO, ONT.—2440 Dundas St. West
WINNIPEG, MAN.—508 McGreevy Bldg.

MONTREAL, QUE.—10 Cathcart St.
VANCOUVER, B.C.—1140 Hamilton St

Quality Fittings, Valves and Supplies
We carry a complete line

Engineers and Contractors for the
Grinnell Automatic Sprinkler System

"We Specialize on Service"

Good Things from Other Magazines

The Building Up of a National Estate*

A Plea for the Making and Carrying Out of Definite Plans, not only for the Prosecution of the Practical Works to which the U.S. Government has Already Laid its Hand, but for the Development of all Possible Natural Resources—Its Application to Canada as well is Obvious

By HON. WM. C. REDFIELD
Secretary of Commerce, U.S.A.

EXPERIENCE in Congress and the Executive has taught me that it is very hard to get either concentrated attention to or sufficient appropriations for the practical work of the Government as distinguished from its political work. By "political" I do not mean partisan, but rather all those matters which come under the head of Government policy—matters of statecraft, of regulation, of the police power, etc. Of course these require thoughtful discussion and study, but there are also great practical services of as great, or perhaps greater, value to the country, which need more attention. In a factory one may debate principles so far as to neglect practice. We need not say less pro or con about the league of nations in order to have our coast properly surveyed. Let us discuss trust and anti-trust, but why not develop our wealth of nonferrous metals? Roads and tractors mean more to the country than many things which fill more pages. Forest fires cost lives and wealth, but we think about them less than of certain taxes over which we growl. We complain—and justly—over food prices, but no concentrated opinion gets behind Congress to insist, refusing denial, that the swamp areas of the country shall be drained and its arid lands reclaimed on a larger scale. We object—and justly—to advanced railway rates, but those who advocate the large development of our waterways find no universal body of opinion springing to their support. We spend—and properly—vast sums for war, but what would become of him who would urge Congress to give the price each year of a single small cruiser to the development on a solid basis of the country's foreign commerce? We pass with enthusiasm, after long debate, statutes which are restrictive or regulative, or which in one or another way express negations. We move slowly and with halting steps along affirmative lines. We do not like to pay high prices for coal, but no concentrated opinion insists that there shall be no further delay in putting our abundant water power at the public service. We do not seem to see the human wrong involved in forcing men to work in the dark bowels of the earth to extract fuel by hard toil while streams that offer light, heat, and power in the open day run wasted to the sea. We know that the beehive coke oven wastes vast quantities of products which we need for motors and other useful purposes, but few would respond to the suggestion that a public waste of this or any similar kind is an actual offence against the public weal which enlightened opinion would not permit to continue. We waste, in making lumber, more than half the values known to exist in the tree; yet we know perfectly well that our forest reserves are going fast and have their near limit. Indeed, a leading authority thus writes me:

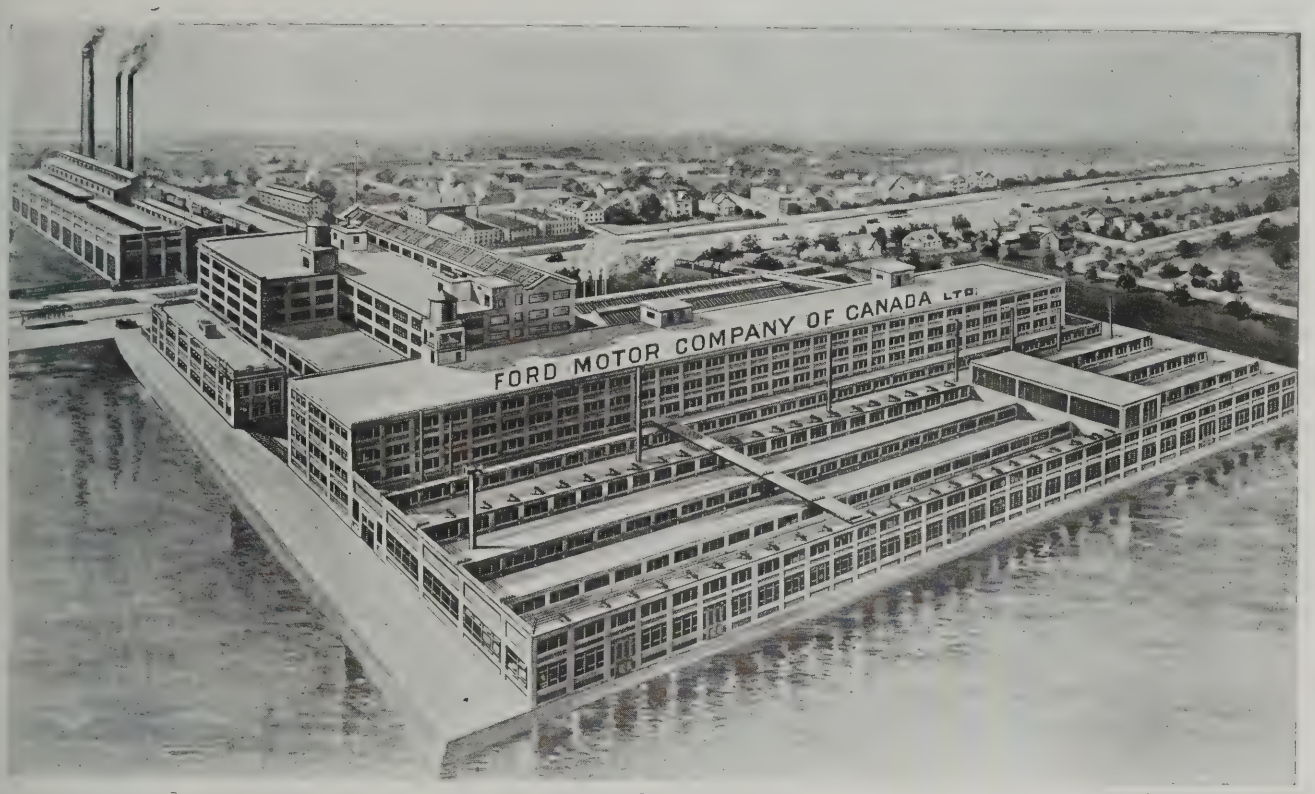
> In the ordinary practice of the yellow-pine industry only about one-third of the entire tree reaches the market and two-thirds of the tree are wasted. It follows, therefore, that when the total annual cut produces 15,000,000,000 feet, board measure, of merchantable timber, twice as much other material derived from the same trees has been allowed to go to waste. The amount of this waste in the yellow-pine industry alone is enough to furnish raw material for the production every day of 40,000 tons of paper, 3,000 tons of rosin, 300,000 gallons of turpentine, and 600,000 gallons of ethyl (grain) alcohol. The potential values of these products are many times greater than the total actual values now developed by the industry.

Fail for Lack of Constructive Vision

Forest fires are preventable at an outlay trifling as compared with the loss, but still we seem to regard them as so nearly an act of God that it is more than doubtful if the necessary appropriations to stop them could be had for lack of a sufficiently developed opinion. Our public and industrial wastes are huge and costly—doubtless far more than sufficient to pay all our annual taxes and provide a sinking fund for our public debt. More paper stock of one or another kind is wasted every year than our mills consume, but I failed to get an appropriation of $25,000 to continue the Waste Reclamation Service. It may be of interest to note that the paper upon which this address was originally written was made from cotton linters, without the mixture of any other paper stock, but with the use of 10 per cent. of clay, 3 per cent. rosin size, and 1.75 per cent. alum. Industrial practices exist wasteful and costly almost beyond belief, which industries are willing to remove under the leadership of the Government partly by abandoning useless styles, sizes, and varieties of one or another product which have no public value and are instead a public loss; yet an appropriation for $100,000 to maintain the Industrial Co-operation Service, doing this and other equally important work, was declined.

The point I am urging and which I welcome this opportunity to urge upon thoughtful men is that we must, if we are to be righteous trustees of our great estate, make political policies practical in another and more thoughtful sense than that of the so-called practical politics of the past. Inheritors of a vast estate, perhaps of an unequalled estate, we are as a whole—no one party, or group, or section, but all of us—seriously neglectful of our property. We are hiding our light under a bushel. We have wrapped our talent in a napkin and put it away. We have done much and are

* Portion of an address before the Executive Association of Wholesale Grocers of New England, at Boston, April 17, 1919. Published in INDUSTRIAL CANADA by special request.



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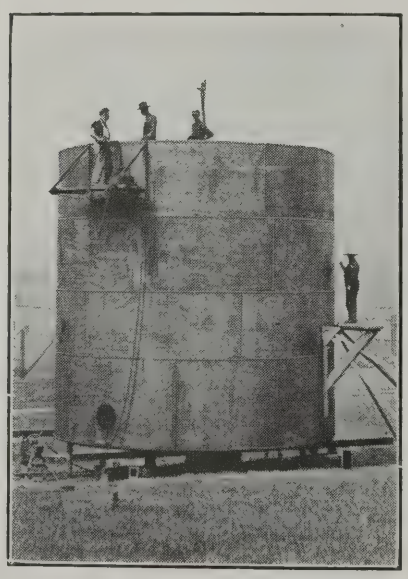
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doing more, but as yet we have not visualized our opportunities. Enlightened men see them, but their voices are as those "crying in the wilderness."

Some of America's Undeveloped Resources

When the stress of war came we suffered for this cause. We were large users of dyestuffs and the largest producers of the materials from which dyestuffs were made. We had neglected to use the one to make the other. We confused cheapness with economy—a mistake not creditable to our national vision—and were dependent upon a foreign source of supply, which was first cut off by war and then became unfriendly. The same is true of optical glass and of other products. We had to send abroad during the war for manganese and chrome for our steel industries. I hardly like to think what would have happened had not the allied navies kept the sea safe for the movement of these needed supplies. We have them at home, but we had not thought sufficiently about the matter to develop them.

In the sea at your doors and all along our coasts are vast supplies of unused foods and other materials. I have in my office good shoes made from the skin of the dogfish and the shark and fine leathers made from other species. We have in the department a fine travelling bag made wholly from fish leather and I have ordered another for my personal use. Yet the effort to develop these supplies of food and leather and other materials, surely a practical work and one worth trying, met not only with a smile at first but with the active opposition of certain of the press.

We draw largely upon foreign sources of supply for ramie, hemp, and other fibres, but give comparatively little thought to the study and development of unused domestic resources of the kind. A year or more ago an investigator placed in our hands a number of specimens of unused American fibres in such condition that they were ready for spinning into yarns. These materials were tested at the Bureau of Standards and found satisfactory. I have not heard whether in any material measure they have come into use, but am satisfied that there lies here a neglected resource.

The osage orange growing wild in the South-west waited to find its place in the economic world until the stress of war cut off our foreign supply of dyes and then came into service in quantities and so marked the bringing into use of a resource theretofore wasted.

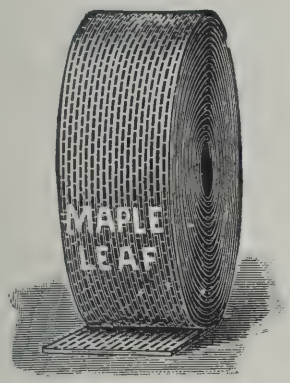
The chemical engineer knows very well that we are neglecting materials which if saved would add immensely to our resources, but, singularly enough in a people as wide-awake as we, finds, or did until recently find, an atmosphere of incredulity and almost of amusement at some of his practical suggestions.

Only under the stress of war did we undertake to make good from domestic supplies our shortage of potash or to follow the example of others in producing nitrates from the air to make us independent of foreign sources.

Lack of a National Programme

There is a definite failure to function on national development on a national scale. We have not as yet proved fully equal to the opportunities which Providence has placed in our hands. This is so completely the fact that men who advocate one or another project of development are suspected of a private interest or at least of seeking the expenditure of public funds for some purpose other than the public good. There does not seem to be abroad in the national programme of any party a controlling conception of America as a whole needing physical development; and few men would be so bold in the existing state of public opinion

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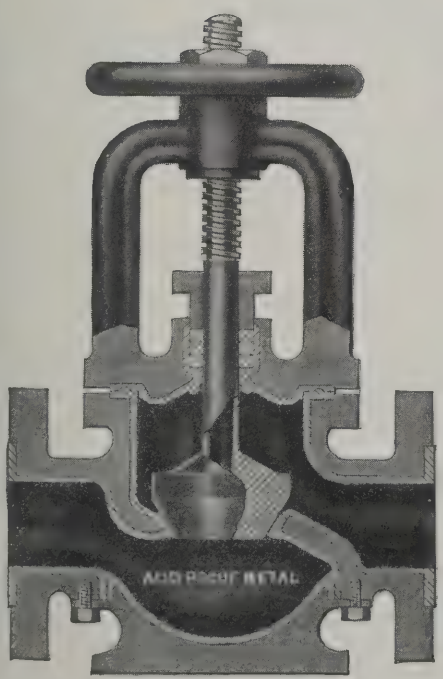
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(or the lack of it) as to suggest the spending of the billions requisite for such development—few though they be in comparison with those expended for war and fruitful as they may be of prosperity, comfort, and peace to the nation.

We must not lose sight of the ground actually gained, or neglect to appreciate the fruitful work science has done through industry in developing many resources in the past and recent present. This progress has been worthy of all praise. Such additions to our food supply as the packing and sale of 30,000 cases of whale meat last year gives examples of what is possible. Many do not realize that the shark is finding a regular sale as a desirable food. Yet, on the other hand, a recent request for $17,500 to operate for a year a fisheries products laboratory, many of whose numerous results would each far more than pay the entire cost, met with failure.

Can be More Independent

We are being asked to invest American capital abroad in the development of the utilities of civilization in lands that are without them, and it is well that we should do this, because from these investments will flow not only income but business to keep our factories moving. Corporations, financial and otherwise, are being formed for the express purpose of developing other lands by American capital and energy. This movement is as necessary as useful, and I must not be understood as being other than in full accord with it. Side by side with it, however, should go a collateral movement which should have for its purpose the development of American resources and the making of our country, as far as possible, economically independent of the world. We shall never reach full independence—no one nation is ever given all the blessings of Providence—but we can become far more independent than we are, and our power of usefulness to the world will be enhanced in proportion as our own resources are made fully known to us and are placed fully at our service.

Fallacy of Conserving Without Developing

Conservation is an admirable thing, and none of us would be willing to take any steps which would weaken its principle or in any way interrupt its practice. But conservation can be of two kinds, and it seems almost absurd to create forest reserves, and, at public expense, maintain them, if we are at the same time to waste one-half of the value in every tree we use. So, in like manner, conservation of water powers is an admirable thing, and none would wish them dealt with other than for the public benefit, with strict supervision that no private or corporate interest secured undue advantage over the public interest. Yet it is going to the opposite extreme to allow the streams these many years to flow unused to the sea. The figure of our Uncle Sam would look somewhat strange, would it not, standing above a vast water power which he owned and requiring, lest it be wastefully used, that it be not used at all? Surely, between these extremes a way can be found if only public opinion has definite, practical bearings.

It is gratifying to learn that Maine has established a water-power commission, concerning which I note the language used in one of your papers, not that it is to conserve the water power but that it is "to develop and conserve for the public" the great water-power resources of that State. Here is the emphasis laid in the right way.

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land Canal. I have long felt that the Connecticut River should be made navigable at least to Springfield, if not to Holyoke, and a great water power developed above Hartford which would be a blessing to many industries in central New England. Let us stop here a moment and think. New England brings, say, 30,000,000 tons of coal a year from distant points to move her industries. In the winter the sea voyage is precarious. At times the land transport has been congested. Yet she continues dependent on outside supplies, while for one or another reason many of her water powers go unused. This is not said by way of criticism upon persons or organizations, but merely to point out the fact that an ususued water power is a public waste, a definite loss to the community, and that a practical people ought not to rest until some means are found for getting it into service. Private ownership should in some way be conditioned upon use and, in so far as Governments are concerned, whether State or National, public opinion should insist upon action which should both develop and conserve.

It is, of course, true that the operations of our Government have become so vast that no one is able to keep in touch with them all, and the claims of various services are at times conflicting and perhaps in details excessive. Nevertheless it is true that there does not seem to exist any keen appreciation of the importance of developing promptly and generally the great estate, which is our country, in which lie resources that the nations need, but which are as yet all but untouched. The responsibility is divided. We say, "Lo here" or "Lo there." Part is for the States, part for cities, part for counties, part for the nation, perhaps most for individuals. There is no general plan, no attempt to grasp the whole problem. The rule is scattered sporadic effort, and therefore the result is in large part waste.

Affirmative Versus Negative Regulation

Even in peace times much of our procedure seems of a curiously negative character. We are very much accustomed to saying, "Thou shalt not," instead of pointing affirmatively the way to what should be done. Some have even gone so far as to urge that laws prohibiting combinations in restraint of trade apply to co-operation, with the Government as a party therein, in promotion of trade, which to the untutored mind seems very much like insisting that black is white. Take, for example, the principle of railway rate regulation: Has it not been negative in its character, intended to prevent some one from doing something? I have sometimes wondered what the effect would be if we were to try affirmations instead of negations. Suppose we were to say—assuming normal times to exist again—to a railway company: "You shall be given rates adequate to sustain your credit and to permit you borrowing what you need at normal rates. This shall be assured you. But in return for this there are certain things you must affirmatively do. You must extend your lines into such and such a territory at a certain rate; you must remember that you are a servant and not a master of the people and must serve without always considering in every detail transaction whether that immediate detail is directly profitable. So, having your credit assured, certain trains must be run where for public reasons they are needed, certain freight facilities shall be supplied, certain double-tracking or other improvement work must be done at such a rate. In other words, being assured of credit, develop your service from the public viewpoint." There are, of course, obvious difficulties, but the efforts toward negative regulation have not been very fruitful. Should not some form of affirmative regulation be tried instead?

"Develop America," New Slogan

On the whole my plea would be this: That public opinion should not only support but urge the Government to make and carry out definite plans not only for the doing continuously and on an adequate scale of the practical works to which the Government has already laid its hand; but that there should be adopted a definite policy, with the requisite funds for carrying it out, whereunder the national domain, arid or swamp, mine or well, whether in the continental United States, Alaska, Hawaii, or Porto Rico, should have its possible resources ascertained and steps taken to their development—this to include our transportation systems, our cable facilities under seas, our waterways, our mines and supplies of oil, our timber reserves, our coast surveys, the resources of our fisheries, the reclamation of waste lands, the checking of industrial wastes; in short, a forward policy of, "Develop America."

Growth of Jap Industry

Enormous Expansion is Reported During the Five Years from 1914 to 1918

The expansion of industry in Japan has been so great during the World War that the industrial and commercial promotions in 1918 were nine times the volume of those for 1914. The five-year period shows an increase from an annual volume of under 200,000,000 yen in both new enterprise and extensions of going concerns, 1914, to more than a billion in both fields in 1918.

	New Enterprises Yen.	Expansion of Old Yen.
1914	190,679,000	161,736,500
1915	177,447,100	223,773,400
1916	611,360,700	489,257,550
1917	1,222,164,500	885,212,000
1918	2,004,825,000	1,175,182,000

An analysis shows that in the second year of the European war the promotion of new industries fell off considerably, although old companies appreciably extended their capital. These were the basic industries of peace times.

In 1916 and the succeeding years, the peace industries did not keep up their enlargement. The war babies drew the capital of the country, mining, shipbuilding, and such war-stimulated fields as the textile, machinery and other manufacturing industries. The banking interests in Japan also began to reflect the new prosperity coming to the country, themselves being stimulated decidedly.

The peak of the abnormal acceleration of Japanese business was reached in 1917, as the upward rush of expanding industry slackened decidedly in 1918 proportionately, although the actual volume still grew.

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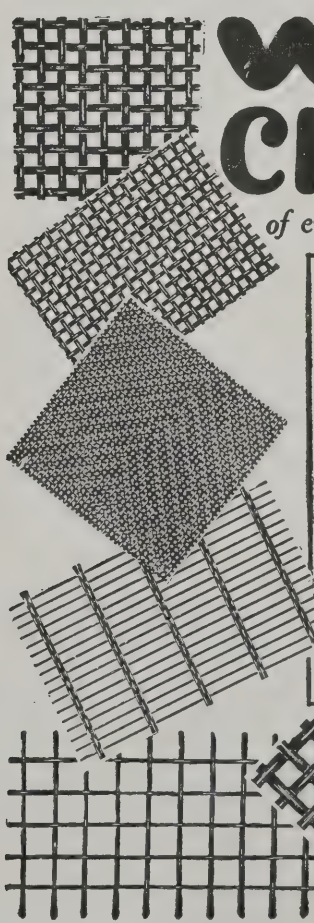
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GREAT BRITAIN'S TRADE BALANCE

Great Britain has to face an adverse trade balance estimated at £680,000,000 per annum, as against a favorable balance of about £226,000,000 in 1913. The volume of production must be increased to the value of at least the former figure before the country can ride on an even keel.

(From Barclay's Bank Review.)

During the last month certain significant figures have been published. In the first place, the Board of Trade returns for January reveal a somewhat alarming increase in our adverse balance of trade. Side by side with this unfavorable feature, unemployment is increasing substantially. A third fact, which it is well to consider in conjunction with the two already mentioned, is that taxation is now on such a high basis that a record has been created—no less than £34,034,000 having been received in one week. Despite this the net result of that week's working was to increase the national debt by approximately £3,500,000.

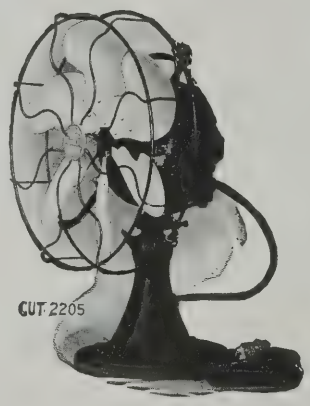
Nearly four months have now elapsed since the armistice was signed, and as yet there is little tangible evidence of a return to normal conditions. Our adverse balance of trade for the one month amounts to £82,614,754, or at the rate of £991,377,048 per annum. For the twelve months ending December 31, 1913, the excess of imports over exports amounted to £134,000,000, this difference being offset by the sums accruing to us as interest on foreign investments and by payments for services, such as shipping, insurance, banking commission, etc.

Before the war it was estimated that our "invisible exports" amounted to approximately £360,000,000 per annum, the principal items being interest on foreign investments, about £200,000,000, and freights due to us on foreign account, about £130,000,000. Our apparent adverse trade balance for 1913 of £134,000,000 was thus in fact a favorable one of £226,000,000, this sum roughly representing the amount of capital which in that year was sent abroad for investment.

Figures Quoted Are Approximate

These figures are of necessity approximate, but they are sufficiently accurate for ordinary purposes. When, however, an attempt is made to estimate the present volume of our "invisible exports," the difficulty of obtaining anything like accurate figures increases enormously. In the matter of pre-war foreign investments, it has been estimated that we still own some £3,000,000,000, the interest on which, on a 5 per cent. basis, amounts to £150,000,000 per annum. On the assumption that the sums we have borrowed abroad since the war are approximately offset by the loans which we have made to our allies and to the Dominions, that the reduction in the total of the tonnage available for foreign account caused by losses and government charters is offset by increased freight rates and that receipts for other services remain unaltered, then the total of our "invisible exports" would be reduced by £50,000,000 to £310,000,000 per annum.

It is, however, doubtful whether the value of our "invisible exports" can be estimated at so high a figure; but, even assuming they do amount to as much as £310,000,000 per annum, our adverse balance of trade is still at the rate of some £680,000,000 per annum, as against a favorable balance of about £226,000,000 in 1913. In other words, the volume of production available for export must, on the basis of present prices, be increased to the value of at least £680,000,000 per



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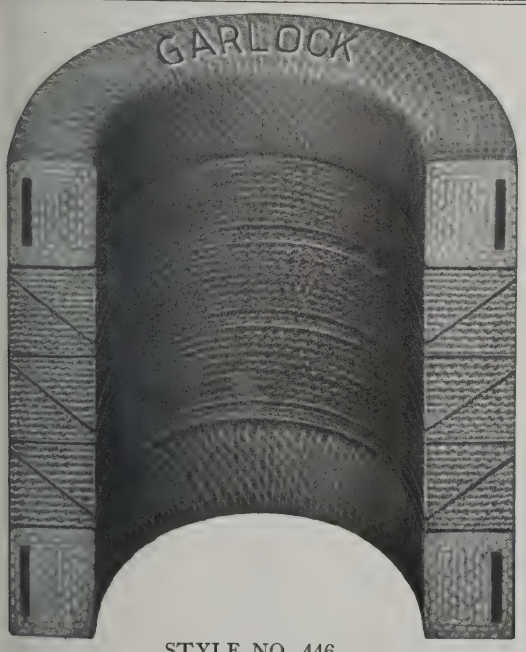
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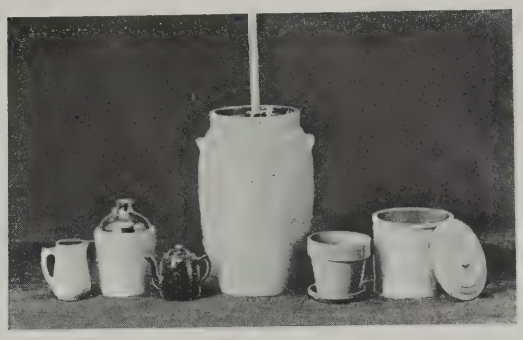
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annum before we can ride on an even keel, or by something in the neighborhood of £900,000,000 before we regain our pre-war position. Alternatively, the volume of our imports must be reduced.

This, substantially, is the trading position at present, and although its solution cries aloud for increased production, yet the percentage of unemployment is increasing. To a large extent this is unavoidable, for even the most sanguine could not have anticipated that an organization which for over four years had been deeply committed to war work could be converted to peace production without a breathing space. Similarly, the demobilization and absorption into industry of a great army must of necessity take time. Nevertheless, four months have elapsed, and still amongst almost every section of the community there is evident a tendency to mark time, and while this continues our external indebtedness is increasing.

Trade Balance Must be Paid

Ultimately our adverse trade balance will have to be paid for, and presumably paid for in goods. The longer settlement is delayed the greater the probability of the goods we have imported at high prices having to be paid for with goods which have fallen in value, or in other words, of our finding that, volume for volume, we have made a bad bargain and paid dearly for avoidable delays.

Probably the chief reason for the fact that more real progress has not been accomplished is the uncertainty as to the labor position, and as to government action in regard to certain vitally important questions, for nothing militates against business more than uncertainty.

The question of excess profits duty is regarded as one of very real importance. So much is this so that an influential deputation waited on the Chancellor of the Exchequer to advocate its removal, and he is now engaged in considering the whole question. A decision would be helpful, for the tax is an arbitrary one, and it is thought that a substantial reduction would encourage and stimulate industry and by increasing production create a more genuine and healthy basis for taxation. It should also tend to lower prices—an important factor both in obtaining foreign markets and in improving conditions at home.

Uncertainty of Price Levels

The uncertainty of price levels also operates against enterprise, as traders are naturally anxious to avoid the possibility of holding large stocks on a falling market. Broadly, however, it may be taken as reasonably certain that the world-wide inflation of credit, which is undoubtedly one of the primary reasons for the higher level of prices, will tend to sustain them at well above pre-war levels for a considerable period. In the case of certain commodities urgently needed in war but in lesser demand in times of peace, substantial downward movements have already been registered, but the goods for which the depleted markets of the world are waiting are in a different category, and although there may, and probably will, be a downward rather than an upward tendency, yet this movement is likely to be a gradual one. Nevertheless, the position is difficult, and manufacturers would be better able to estimate the probabilities if the government policy were definitely known as regards such questions as dumping, the fiscal policy, the deflation of currency, etc.

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The return of the country to a peace basis and the opening of the markets has a direct bearing on your business and on ours.

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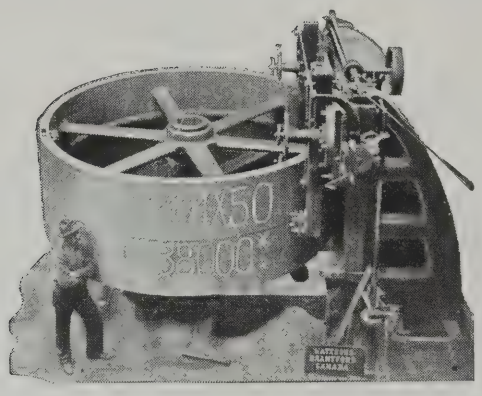
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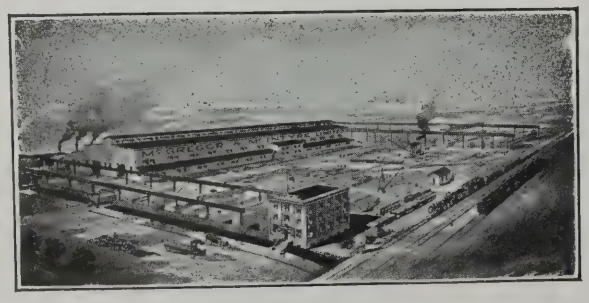
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SWAPPING IDEAS WITH MANAGERS

The following extracts from interviews with business executives are taken from the notebooks of several journeys. They indicate in some measure the kinds of problems that leading executives are giving their thoughts to. They also indicate how these problems are being met by these men.

By ALFRED PITTMAN.

(From "System.")

"To assume that you can solve with dollars any more than a tiny fraction of the problems that come up in dealing with social groups, is—is to be a damn fool."

The speaker was a manufacturer, the head of a company that employs 3,000 people.

"I don't mean that the dollar part doesn't have to be all right. It does—or it will raise the dickens sooner or later. But it is never more than part of the solution; and the higher up in the organization you get, the smaller the part it is. One district manager, for instance, wants to be moving; he begins to feel after awhile that he has worked a place out, and that if he is to progress he must go somewhere else. Another man likes Detroit, say, and wouldn't be happy anywhere else, no matter what his income would be. You have to take those two men's inclinations into account. One of the best compensations for them is to be living where they want to live.

"Take a man with two small sons. Do you suppose the main thing with him is whether he is getting $2,500 or $3,000 a year now? Not a bit of it. He's thinking more about 15 years from now. The boys will be wanting to go to university then. The father will be at an age when new jobs are harder to get into if the one he has isn't satisfactory. What is the company's record for dealing with men who are in the position he will be in then—and in the years between? That is what he is thinking about. And nothing you can do with dollars alone just now will entirely satisfy him."

Using Dollars the Wrong Way

"I'll never forget how we bungled a situation once by using dollars the wrong way," said this same manufacturer. "We went to great pains to build up a suggestion system, and to get all departments to contribute. We said that we would pay whatever the suggestions were worth. In practise, ideas that weren't of any value at all from the profit point of view, but perhaps saved someone a little trouble, we paid for at the rate of a dollar or two each.

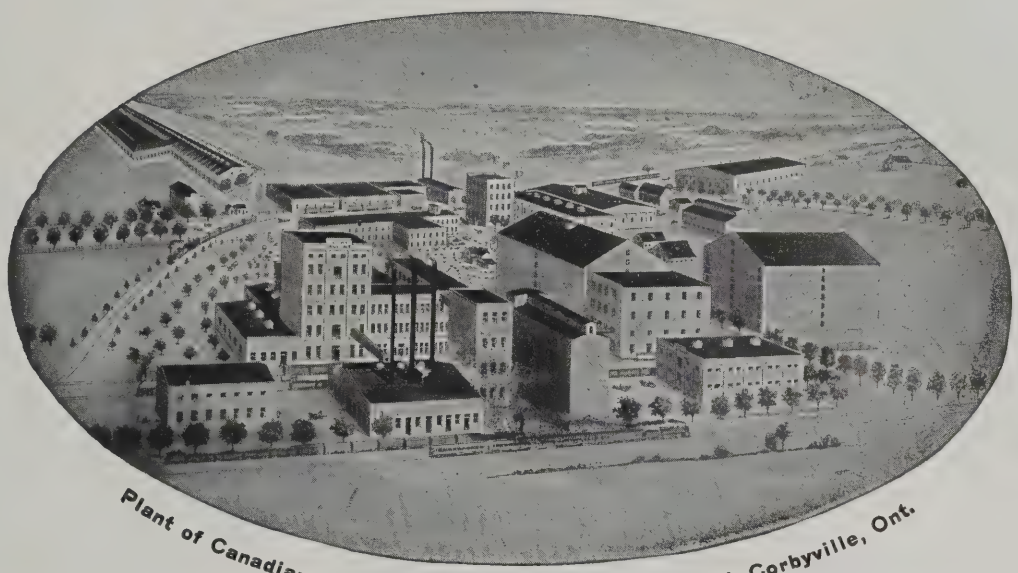
"That went very well among the factory workers. But when we sent the first dollar to a salesman in the New York office—from which we had been especially anxious to get suggestions—it absolutely stopped suggestions from there, and we were a year and a half getting them started again. The salesman was laughed at when his dollar came. It seemed petty.

"We now have a medallion of the barn in which our business started, which we send out sometimes as a reward for suggestions. It costs hardly more than a dollar. Yet some of the New York salesmen have been glad to get it.

"The fact is, you don't care so much for suggestions from a man who makes them for money alone. And that is more or less true of all personal services."

I had talked most of the morning with the head of an organization numbering over 2,000. We were in his office

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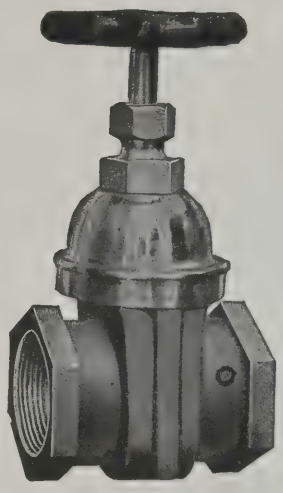
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adjoining the general offices and the works, and we had not been interrupted once.

"The work I set for myself when I took this place," he said, "was to organize myself out of work; and you see how I have succeeded. There is someone out there who can handle every routine thing that comes up, even the routine of financing. I am entirely free to deal with questions of policy, and emergencies, and to look about and prevent emergencies.

Picking Executive Types

"The most important job a manager has—I had almost said his only job—is to choose out of the mass of men whose talent is only for work with their own hands, those who can do the various kinds of executive work that the business requires, and to train and place them. As he succeeds in that, he works himself out of work."

"How do you pick the executive types?" I asked this man.

"There is no sure way that I know of. All the judging of men that I have ever seen was just tentative—when it wasn't foolish. But there are certain signs that are worth following up.

"If a man has poise, speaks in a way that induces action, and has judgment, he is a pretty good bet, especially for positions in which he will chiefly have to carry out the orders of others—for foreman, for example, or perhaps manager of a department. You can often sense these qualities when a man first comes into your room, or when you first see him at his work.

"There's a lot of this kind of talent, though, lying around latent. The men themselves don't know they have it, and you could never tell it by looking at them. Sometimes you can get a clew to it by asking the men if they would like to be foremen—and a still better clew by asking them why. The desire for leadership may indicate a talent for it, although the rule is by no means infallible. Nor is it certain, when a man is afraid to try leading at first, that he has no talent for it. Sometimes an intelligent fellow needs to be jarred loose.

"The surest way of uncovering the talent is the way they used in the officers' training camps—letting each one in the squad take his turn at leading it awhile. The plan is often practical in business during vacancies or absences.

The Faculty for Planning

"But if we look only for 'snap and precision,' poise and motivating speech, we are apt to overlook some of the best executive ability. These qualities are, of course, valuable for all grades of executive work. But in the higher grades, those in which orders are formulated as well as carried out, another quality assumes a greater and greater importance, and that is constructive imagination—the faculty for sound planning.

"This is the pearl of great price among executives; and it sometimes appears in men in whom some of the most striking qualities of the other type of executive are missing—as in General Homer Lea, who was a cripple; Napoleon, who was undersized; and Moses, who was 'slow of speech.' This quality betrays itself not so much in physical characteristics as in an energy for accomplishing more and accomplishing it in a better way.

"A man with that sort of zeal is always worth watching."

" . . . Sometimes an intelligent fellow has to be jarred loose."

Here's how another executive, the vice-president of an internationally known manufacturing business, spoke to that text. I hadn't proposed the text. We had been talking about



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are saving money on power consumption, lubrication, labor and general factory upkeep.

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where good executives come from, and how they sometimes come; and the manufacturer was making his own point.

"The manager of one of our branch stores," he said, "used to be a bookkeeper in the home office. He got $75 a month, and as bookkeepers' pay went then, there wasn't much chance of his getting more. I knew him pretty well—it was when the business was small, and I knew most of the men pretty well—and I went to him one day and told him he was trying to go up the wrong road. I said it was a blind alley, and would never get him anywhere. Where he ought to be, I told him, was out selling. That was where the big opportunities were.

"'We've got a territory open now,' I said, 'and I'd like to see you try it.'

"He thanked me and asked me for time to think it over. The next day he told me he'd rather not make the change.

"'I'm married,' he said, 'and I guess I'd rather have a small thing that's sure than a big one that isn't. I don't know whether I can sell or not, but I do know I can keep books.'

"I didn't argue with him. But I went to him again after a few weeks.

"'You're all wrong about this,' I told him, 'and I'm so sure of it that I'm going to guarantee you more than you are making now, with the chance of the commissions to boot. And if you don't like it after you've made the trial, you can come back to your old job.'

"On those terms he tried it. He had a pretty rough time for a couple of weeks. Then he got some orders, caught the knack, and began to have a good time and do very well. He's no great star, but he is a good store manager, and draws five or six thousand a year."

Building up Good Will

I went to see the head of a large private business who for the time was in charge of a government office in Washington. In the outer room I was received, not by an office boy or a telephone girl, as, of course, I had expected, but by an elderly southerner; and he attended to me so courteously and capably that I afterward asked his chief about him.

"He's one of my good will builders," said the chief. "People get their first impressions of us in that room. If they are badly treated there, they are just that much harder for us to do business with. And even if we do finally satisfy them, the first impression lingers, and they are less likely to think favorably of us when they go away. So I have tried to have the receiving done as well as possible.

"When I first came here, this man was working as an accountant. He didn't like the job or do especially well at it, but I noticed his happy way of meeting people. I told hm how important I thought the reception work was, and asked him if he would like to try it at the same salary, with the chance of an increase later. It was fancy salary for the job, according to the old office standards, but he has saved us a good deal more than enough trouble to pay for it.

"In my own business," the man went on, "one of the members of the firm receives the visitors. The boy at the door has instructions to show them all directly to his office. He can tell better and more quickly than any one at the door could, whom the visitor should see, or whether he should see any one. There is no fumbling of callers from office to office. Time is saved, and a good impression is left on the visitor.

"We have made it a special rule also to be courteous to the salesmen who call on us. They are more or less used to



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the cold shoulder, and when any one goes out of his way to be cordial, they remember it, and speak about it as they go around. Salesmen are the great propagandists. They give their views of people and things, in smoking compartments, hotels, their customers' offices, wherever they go. We are always coming across the good effects of our policy with them—sometimes in the most unexpected places.

Treating Salesmen Well

"We try to build good will within our organization in much the same way. When one of our salesmen comes to the home office, we treat him as a guest. If I can, I introduce him about the offices myself. He is given every opportunity to understand how things are done there. We see that he knows what plays are worth while, that he has a guest card at some club, and that he is comfortably fixed up at his hotel.

"Small things, some of them. But they pay, all of them."

"I never had any trouble to speak of with my workmen," said an engineer whose operations have extended to at least three continents, "and the reason, I think, was that I knew them—was really well acquainted with them personally."

"You can't, of course, know them all now," I suggested.

"No," he said. "That is one of the penalties of a big organization. But I have done the next best thing. I have made it a point to know the different property managers, superintendents, and other executives, just as far down the line as I could—I mean, know them in the same intimate way that I used to know the workmen.

"You have noticed how, when a manager has an aloof, unsympathetic way with his executives, the executives usually have the same way with the executives under them, and so on down the line. Just as the brakeman on the train usually wears a moustache if the conductor does. The spirit of the boss—to say nothing of his mannerisms—is pretty sure to be the spirit of the works.

"So, if the manager has a fair and friendly attitude toward his executives, that attitude is likely to appear all through the organization. To a certain extent, the thing comes about spontaneously. It did in our case; but I helped it along some by telling my executives what I was about. I told them I wanted as far as possible to maintain the relation between the man and his immediate boss that we had when the business was small.

"We have done this; and the result is that we have just about as little labor trouble as ever—although in some places the radicals are all around us."

Methods of Government

Any business investigator who goes about nowadays with his eyes open is pretty sure to notice three types of concerns: those (a rapidly increasing number) in which there is a good deal of both the form and the spirit of democratic government; those in which there is a good deal of the form and little or none of the spirit; and those, the largest class of the three, in which is much of the spirit and, as yet, little or none of the form.

A middle western factory, one of the several plants manufacturing a widely known piece of factory equipment, is an interesting example of the last class. There the open door to the office of the plant manager, who incidentally is also one of the company vice-presidents, was the only outward sign of the free expression that is open to every employee in the place—of the power of the employee to reach and influence the management with his views.

"The door is always open," said the manager. "There isn't so much as a secretary between me and any one in the

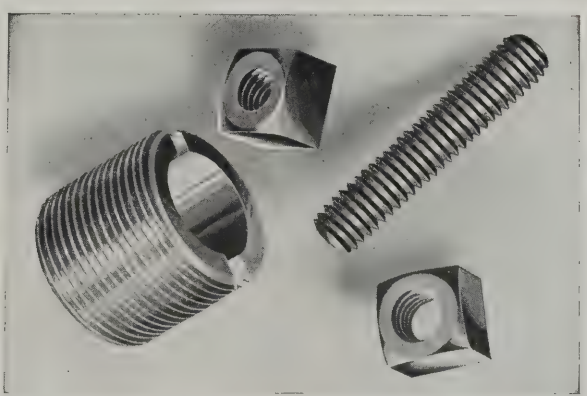


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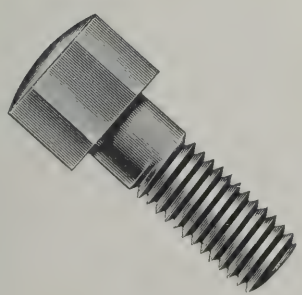


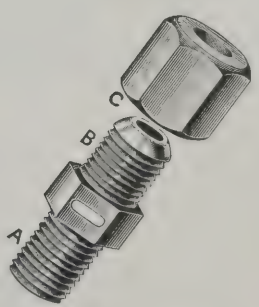




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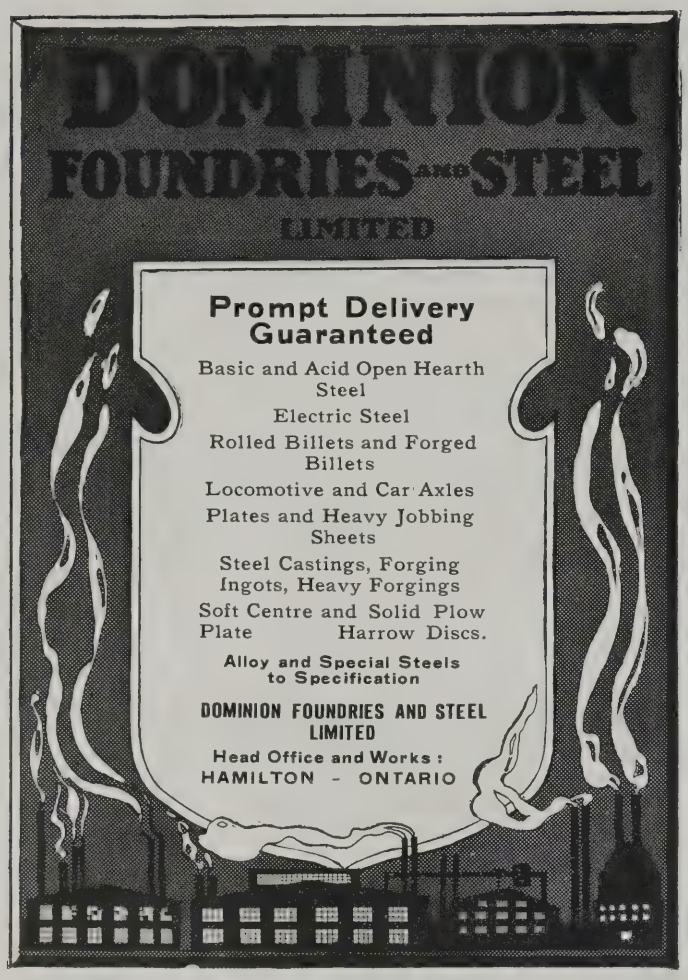
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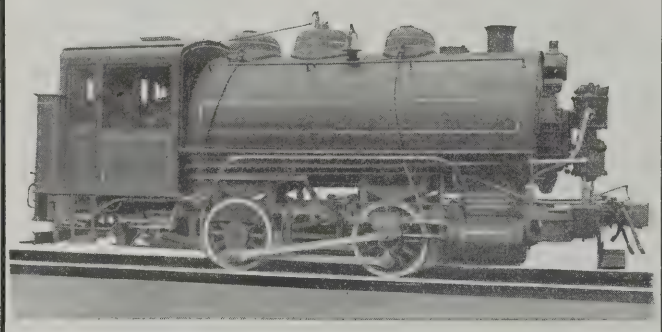




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plant who wants to see me. The understanding is simply that any one who wants to can come in whenever I am not busy with some one else.

"Once or twice it has happened that I have been bothered by somebody who came in too often, came in with trivial things to take up, evidently with the idea of attracting attention. In those instances I have been quite frank. I have said:

" 'Jack, I know you won't mind my saying you're coming in here with too many things. I want you to come in just as often as you need to, but before you come, think whether the thing really ought to be brought to me.' . . . Something like that; and the man has understood and stopped bothering me.

Taking the Open Door to Employees

"But, for the most part, I have felt that even the open door did not bring in all the employees who ought to talk to me. And so, in a way, I have taken the open door out to the employees. I make a trip around the plant once or twice a day; and I have tried to build up a feeling among the people that I want them to come to me on these trips and tell me anything they think I should know. I have done this mostly by chatting with them as I go about and showing them that I appreciate it when they do tell me things that seem important to them.

"I have got a great deal of valuable information and guidance in this way. If there is any cause of dissatisfaction among the men, I am pretty sure to hear of it on my rounds. Some one will nearly always come to me about it. The men have also come to me with many ideas for savings and for improving our methods and our product.

"If I were to take the attitude that these things were none of their business, that I was managing the plant and didn't need any help from them, they would shut up like clams. But I like them to feel, and I like to feel myself, that these things are their business. And even if the suggestion isn't of any value, even if I already know what they tell me, I appreciate it just the same, and show that I do.

Handling of Suggestions

"I could also stop the flow of suggestions pretty quickly by failing to see that those which are good are carried out. If the expression of the workmen's views were merely verbal, and brought no practical results, it would soon stop being any expression at all. As a matter of fact, I try to see that the right ideas produce results just as surely as if the workmen actually had votes to register on the management of the plant.

"There is just one condition I insist on, in receiving the suggestions. Any workman can come to me about anything, in either his own or someone else's department, but he must always come with a constructive purpose. If he comes out of bad feeling for a fellow workman, I am the one who shuts up like a clam. I do not listen to destructive criticism.

"So when one workman sees another talking to me, he knows there is no mere spite work going on. He knows that he is affected only if he has neglected something, only if criticism of something he has done or left undone is itself in the way of constructive criticism.

"The understanding all through the force that anything that deserves that sort of criticism is pretty sure to get to me, and get to me quickly, helps to keep all the people doing their best."

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ACCURACY IN COST SYSTEMS

Costs should be blended into the regular accounting books so that they will show monthly the money value of the factory inventory and the net profits of the entire business. This is where most cost systems fall short. They are single-entry instead of double-entry systems.

By HASBROUCK HAYNES, M.E.

(From the "Manufacturers' News.")

An accurate cost system is the only correct basis for estimating on new work or for pricing standard lines of product. It is the only way of knowing the actual profit or loss resulting from each sale. Knowledge of costs is the first step towards a reduction of costs resulting in an increase of profits.

Few manufacturers, however, enjoy the comfort of a simple method for obtaining accurate cost information. Moreover, but a few fully recognize the ultimate value of a complete cost accounting plan.

Too many manufacturers' cost systems are simply initial records of work accomplished, the usefulness of which ends once the goods are finished. This, of course, is one of the important features of cost accounting, but there are other features no less important.

Net Profits and Perpetual Inventory

The ultimate object of a complete cost accounting system is to give the management facts and figures upon which it can base intelligent criticism of past and present business and for more profitable direction of the affairs of the future. This information should be available promptly every month. It should be very complete and yet expressed simply and in terms of dollars and cents, monthly reflected in the balance sheet and profit and loss statement.

The ultimate cost system, therefore, goes further than just telling the cost of the product made. Costs should be blended into the regular accounting books so that the books show monthly the money value of the factory inventory and the net profits of the entire business.

This is where most cost systems fall short. They are single-entry, instead of double-entry systems. They are separate from or patched onto the regular double-entry accounting system. They are not a part of the accounting system and controlled by it. As such they are no more successful than a self-starter patched onto an old car not originally designed for a starter. To-day self-starters are designed and cast integral with the motor itself—so also a cost system should be designed and made an integral part of the accounting system which it supports.

Profitableness of Different Lines of Products

Modern manufacturing is increasingly complex. Where there are different kinds of types of product it is no longer sufficient to know that the business in general is a paying proposition. Without the aid of a good cost system it is impossible to know the profitableness of any single line. With the aid of a good cost system the manager is informed regarding shop operations as they progress and can often avert losses, instead of waiting until the work is finished, when a remedy will come too late.

A cost system is indispensable if work is to be planned in advance and if correct estimates are required, whether for securing new work or for insuring that production cost shall not exceed market possibilities. The custom of estimating costs in advance of production and then insuring that these costs are met in production, is coming more and more into use as the practice of planning work in advance becomes more common.

To an industry as a whole the necessity of accurate costs is of prime importance. The manufacturer who underbids his competitors on the basis of faulty cost records not only works his own ruin but that of his competitors as well. This is the worst form of competition and should be most feared. It is little satisfaction to the manufacturer whose costs are correct to know that the successful bidder is digging his own grave, so long as others, no better informed regarding costs, are constantly coming into the field.

The successful manufacturer who once offered to send his cost accountant to teach correct cost-finding principles to any competitor was a foresighted individual.

History Repeats Itself

Most manufacturing concerns start in a small way and grow up more or less rapidly to a point where the details become so complex and the units so voluminous that authority and responsibility must be delegated. Need for some check on costs and expenses is paramount for future expansion.

The management then feels the urgent need of a cost and accounting system which immediately and accurately reflects the results and the financial condition of the company each month. To wait for the annual physical inventory is dangerous. Too much might go wrong in the meantime. But right here is where the mistake is usually made.

The result is but to be expected, for the designing and installing of a successful cost system, except under the most favorable conditions, is the work for the engineer-accountant. Therefore, any manufacturer who has had unsatisfactory experience with costs or is contemplating the installation of a cost system would find it very much to his advantage to call in the engineer-accountant who has specialized in costs to do the work.

Bookkeeping and Cost Keeping

Bookkeeping and cost keeping are distinct work. Bookkeeping is concerned with recording facts; cost keeping deals with finding facts.

To establish a simple means for determining the amount of material and labor used in each unit of product, the bookkeeping is concerned with recording facts; cost keeping is at sea. He is accustomed to working with figures, vouchers and accounts. He well understands the transactions of ordinary business. But it takes the engineer, by virtue of his peculiar training and experience, to comprehend fully manufacturing processes and operations and, where any doubt exists, to be able to subordinate the factory transactions of material and labor to a definite routine for costing purposes.

Then, too, the blending of the cost records into the regular accounting books for obtaining the monthly profit on each class of a product and for the maintenance of a perpetual inventory in money value is an art in itself.

To do it right it requires a specially designed classification of inventory and other cost accounts in order that a double-entry check may be maintained throughout.

But when once the cost system has been designed and installed then the accountant or bookkeeper is the ideal man to keep it up and actually blend the cost records into the financial books in accordance with the predetermined plan.

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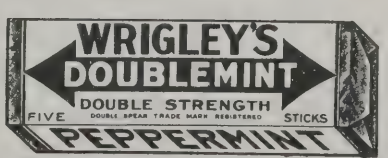


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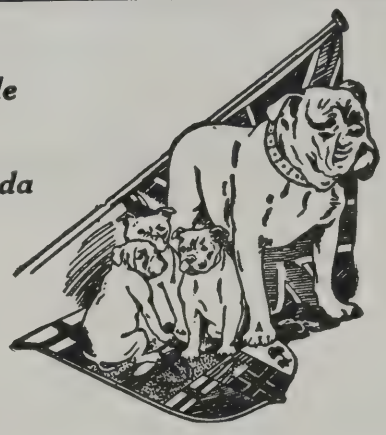
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INDUSTRIAL RESEARCH IN THE U.S.

The writer of the following article, who is professor of mathematics in the University of Toronto, describes two visits which he paid to centres of industrial research in the United States during the past two years. What he saw and heard makes very interesting reading and at the same time points to the need of the development of similar work in Canada.

By J. C. FIELDS, Ph.D., F.R.S.
(From "University of Toronto Monthly.")

In June, 1917, and in August and September, 1918, the writer visited centres in the United States where there were organizations for industrial research. The effects of the war in stimulating research were in evidence on both occasions. On the former visit these effects were manifested largely in attempts to supply pressing economic needs. When war first broke out the people of the United States were deprived of important articles which they had formerly imported from Europe. The research workers of the country were called on to devise means of producing either the articles themselves or effective substitutes. The results surpassed all expectations.

Synthetic drugs and chemicals, which were formerly derived from Germany, are now prepared in the United States. Certain high grade steel alloys, for which America looked to Austria, are now manufactured on this side of the Atlantic. The American dyestuffs industry has been placed in a position where it can cheerfully meet all competition. In 1914 the United States produced less than $2,500,000 worth of artificial dyes. In 1917 the output was more than $57,000,000. The total annual production of the world before the war was $92,150,000, of which Germany's proportion was $68,300,000.

Production of Potash

The potash needs of the country are not as yet satisfied. Nevertheless in 1917 the product from various native sources totalled $14,000,000. Of this $8,000,000 worth came from the brine lakes of Nebraska and other states. The kelp of the Pacific Coast furnished $2,000,000 worth and $1,000,000 worth was provided by the molasses residue from distilleries. Only $750,000 worth came from the chimneys of cement factories. Dr. Van H. Manning, the Director of the Bureau of Mines, to whose kindness I am indebted for these figures, expects that ere long half the needs of the country will be supplied from the last named source. He is hopeful, too, that a considerable amount will ultimately be recovered from the dust from blast furnaces. Much valuable work has been done by the Bureau of Mines in connection with the two last mentioned sources of supply.

When I visited the United States in 1918, practically all the research laboratories were busied on war problems. The research men were working under pressure and in one laboratory I was told that they were doing in one month what in peace times it would have taken the greater part of a year to accomplish. The laboratories were not as accessible as they were on my visit of the year preceding, and where one saw something of what was being done it was understood that much of it was of a confidential character.

When the United States entered the war, the research workers in the universities and elsewhere volunteered their services. The scientific forces of the country were mobilized with results which have been far reaching. The achievements of science in the war cannot but appeal to the popular imagination. When the ban of secrecy is completely lifted and it is realized how multifarious and how important these achievements have been, public opinion will surely insist on



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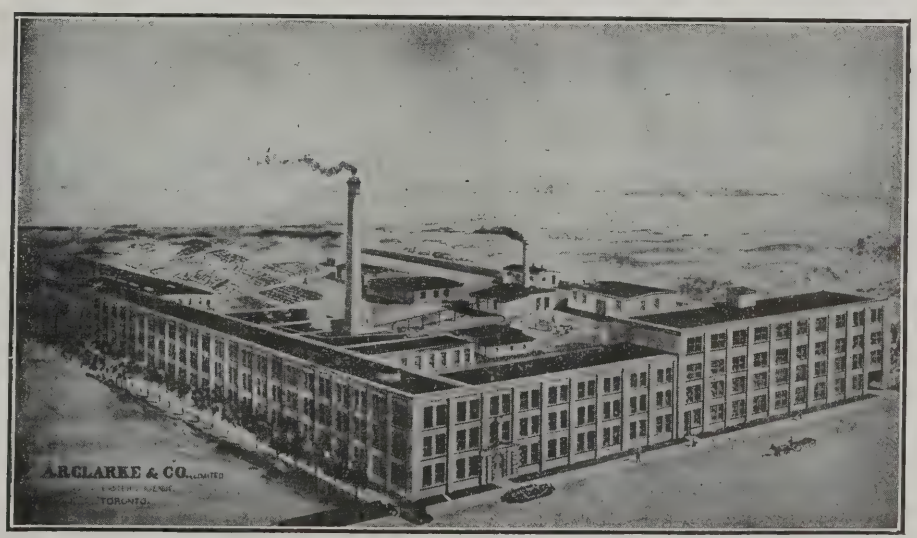
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a more generous support of research and a better treatment of the research worker, both inside and outside the university. The manufacturers, including the smaller ones, are becoming more and more impressed with the potentialities lying in the application of science to industry. I was told of a manufacturer of woodenware on a small scale who took up the construction of aeroplane parts and, in that connection, experienced the benefit of scientific advice. He stated that he had formerly had no faith in the scientist. He now realized, however, that many of his difficulties might have been solved for him ten years earlier had he been willing to consult a scientifically trained man. This instance was cited to me by a well-known chemist who also told me the story of a group of firms which had muddled over a problem until they had expended $100,000, without result. They then came to him and stated that they were ready to spend $100,000 more on the problem and that they were willing to wait five years for a solution. Three research men were put to work on it and the matter was speedily cleared up. The bill was $2,000. The results attained have proved of importance in the war.

One of the laboratories visited by the writer last August was that of the Eastman Kodak Company, located in Rochester, N.Y. This laboratory employs a staff of forty research workers and costs $150,000 for annual maintenance. When the United States declared war these research workers, together with certain others in the employ of the company, organized themselves into a teaching staff for instructing members of the air force in aerophotography. After a sufficient number of the latter had been trained so that they could do the teaching, the research workers returned to their laboratory and devoted themselves exclusively to war problems. Their services cost the country nothing, their salaries being paid by the company. The problems handled presented a considerable diversity in their nature. They concerned themselves, among other things, with anti-submarine devices, with liquid fuel and with aerophotographic apparatus. In particular, much time and ingenuity were expended in originating new types of color filter, that invention which plays such an important role in bringing out specific features of a landscape as photographed from an aeroplane.

Co-operation with Universities

It may be noted that the Eastman Kodak Company is collaborating with the University of Illinois in manufacturing and selling at cost certain important chemical reagents. These reagents, which were formerly imported from Germany, are employed in chemical research.

Another large industry in Rochester is that of the Bausch and Lomb Company. Ths company employs nearly 6,000 workers and is the largest optical instrument company in America. Of its output 98 per cent., I was told, was for war purposes. Among its most important products are the rangefinders for the navy and anti-aircraft service. Some of those I saw were thirty feet in length. For the construction of rangefinders the very finest optical glass is essential. At the time of my visit to the United States in 1917 such glass was not to be had. In the meantime scientific men brought their skill and methods to bear on the matter and when I visited Rochester in 1918 a supply of optical glass was available which was equal to the best which had been imported from Germany before the war.

After leaving Rochester the writer visited Syracuse, Schenectady, Worcester and Boston. Near Syracuse is the laboratory of the Semet Solvay and the Solvay Process Companies. In this laboratory fifty research workers are employed. Much work has been done on processes for obtaining trinitrotoluol and on processes for producing benzalchloride and thence deriving benzaldehyde. A recent outcome of work done in this laboratory is a process for ex-

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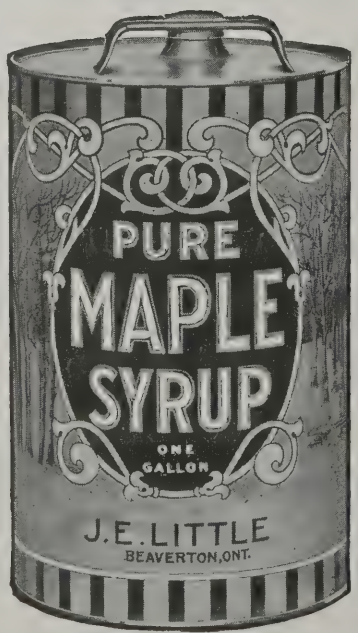
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tracting potash salts from one of the larger brine lakes of California. They have also succeeded, in collaboration with Government chemists, in catalytically oxydizing ammonia for the manufacture on a commercial scale of nitric acid.

The laboratory of the General Electric Company at Schenectady was visited by the writer both in 1917 and in 1918. During the past year, I have, on several occasions, given details in regard to some of the achievements of this great research establisment. Dr. Dushman, too, a member of the research staff at Schenectady and a graduate of our own University, has recently lectured here on the work of the laboratory. It may, therefore, suffice if I mention that in August last the laboratory was given over completely to war work, that the members of the staff were in particular preoccupied with the submarine problem and that the expenditure on research in 1918 was more than double that in the preceding year. It would probably be a safe guess to say that the General Electric Company in 1918 expended on research in its various laboratories a sum which did not fall far short of $2,000,000.

Conduct Department on Commercial Basis

At the Worcester Polytechnic it struck one as rather novel to find that the Department of Mechanical Engineering was conducted on a commercial basis. The Department has its own shops, with a weekly pay list of $1,800. It possesses its own patents and manufactures apparatus for the market. In the year 1917-18 it did a business of $220,000. At the time of my visit 95 per cent. of the output of the shops was war work. A student, I was told, could help pay his way by working in the shops.

A number of pieces of research which had engaged the attention of members of the staff were described to me. In that connection stress was laid on the necessity of collaboration on the part of the engineer with the physicist and the chemist, as in so many cases his problems bring him up against difficulties of a purely scientific character.

Another engineering institution is the Massachusetts Institute of Technology, which is now housed in its magnificent new buildings on the Cambridge bank of the Charles River. The Institute conducts a course in physics and chemistry which is specially intended to train men for industrial research. It has extensive research laboratories, which at the time of my visit were being utilized for war purposes. It is also well-manned—a prerequisite in order that individual members of the staff may find time for research. A point which I noted was the emphasis which is laid on the calculus as an instrument for the engineer.

The A. D. Little Laboratory

Not far removed from the Institute of Technology, on the bank of the Charles River, stands the laboratory of the A. D. Little Company, Inc. This is a model commercial laboratory, employing forty research workers. One of its products is cellulose acetate, from which artificial silk, bristles and other articles are manufactured. A complete pulp and paper mill constitutes a part of the equipment. There is also a distillery, which is working on the extraction of alcohol from bananas. At the time of my visit war work was being carried on in the testing of foodstuffs on a large scale for the United States Government and the New England Food Administration. A study was also being made of varnishes for aeroplanes.

An interesting feature of Dr. Little's laboratory is an industrial research museum. This museum, which is still in its infancy, has as its purpose to exhibit the historic development of a variety of industries which depend on research for their growth. For example, the evolution of cottonseed oil and its by-products from cottonseed is illustrated. What was here dead waste forty years ago now means, thanks to the

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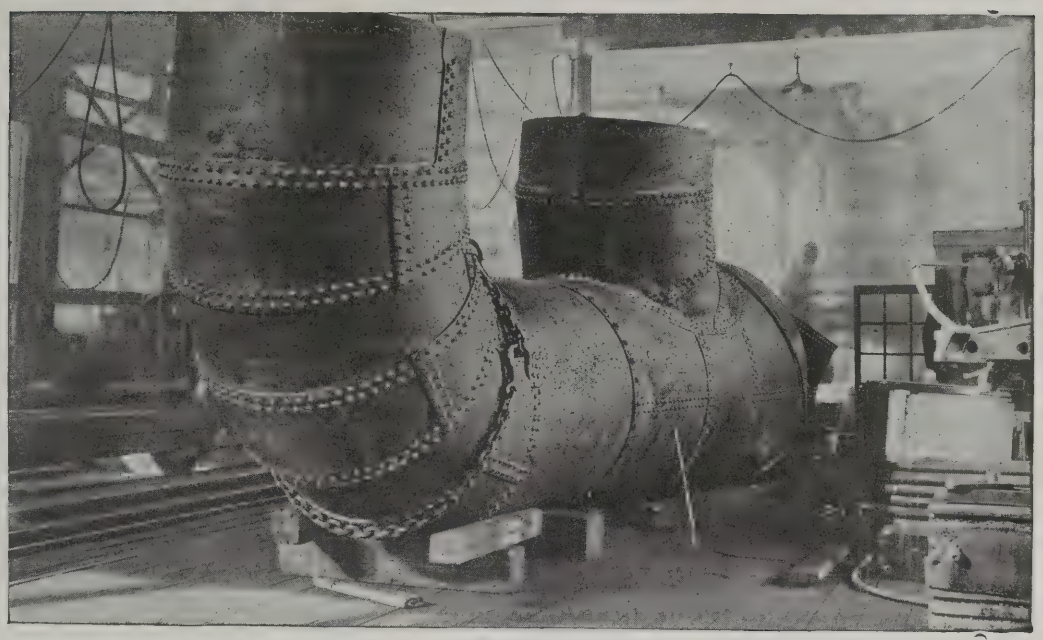
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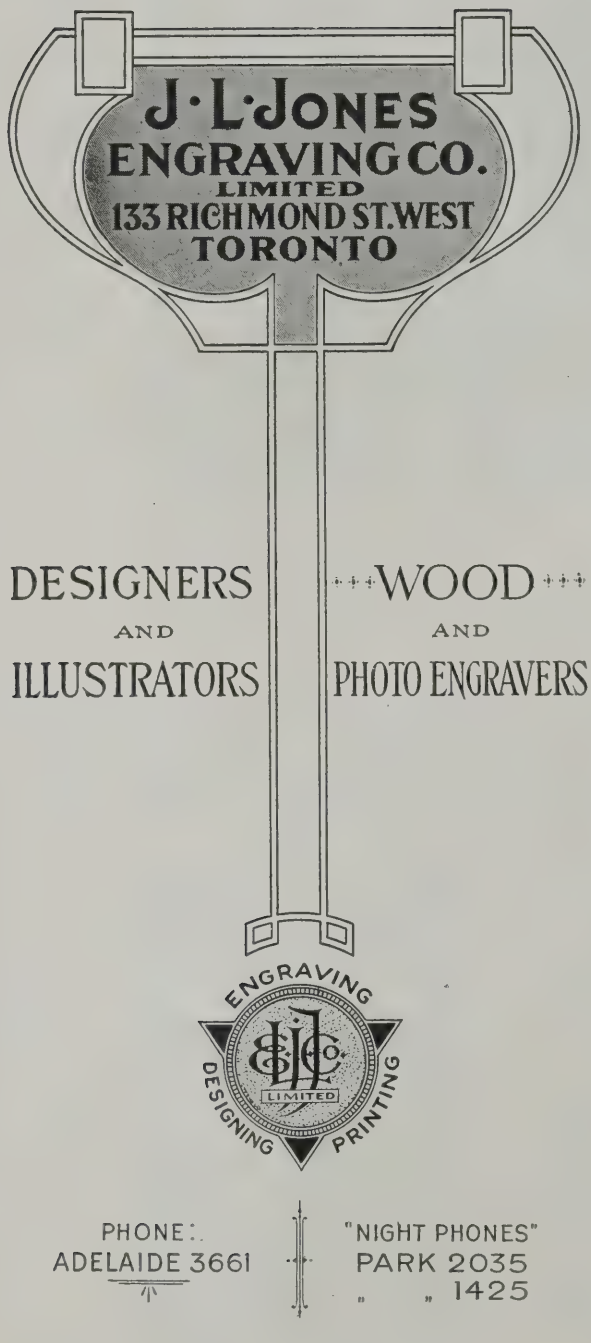
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research worker, a product whose value to the United States for the year 1918 was $320,000,000.

Intermediate between Boston and New York I made a stay at Woods Hole, a Mecca for research biologists during the summer months. Here is located the Marine Biological Laboratory, on whose staff by the way are several good Canadians domiciled in the United States, including the Director, Professor Frank Lillie, of Chicago. Investigations were under way on a variety of subjects. In particular, a good deal of work was being done on problems connected with heredity. A touch of the war was in evidence in that the effect of poison gas on cell tissue was being studied. The war too was responsible for an attempt which was being made at a station of the U.S. Fish Commission in the vicinity to obtain a substitute for gum arabic from the kelp which is found along the coast.

In New York the writer met a number of scientists with whom he discussed industrial research. Among these was Dr. Takamine, the eminent Japanese chemist, who is responsible for the research movement in Japan. Dr. Takamine informed me that a sum of $5,000,000 (10,000,000 yen) was being raised to establish a research institute for physics and chemistry in Tokyo. The Emperor had subscribed $500,000, Parliament $1,000,000, commercial and industrial concerns $2,000,000, and it was expected that the remaining $1,500,000 would soon be in hand. The buildings are at present under construction. Members of the staff are now visiting other countries in search of the latest information, and will be on hand, prepared to assume their duties, as soon as the buildings are ready for occupation.

In its research undertakings the Japanese Government has been advised by Dr. Alcan Hirsch, of New York, who is also adviser to the Japan Dyestuffs Company, on whose capital of $4,000,000 the Government guarantees 8 per cent. annually for ten years.

On the waterfront in New York are located the laboratories of the Western Electric Company. These are the greatest laboratories of their kind in the world, and Dr. F. B. Jewett, the Chief Engineer, on his recent visit to Toronto told us something of their weird achievements in the realms of wireless and multiplex telephony and telegraphy and in long distance telephony. It is now possible to hold more than one telephone conversation and to transmit several telegraph messages simultaneously over the same wires without the slightest interference or confusion. It is also possible for a man standing on the ground and speaking in his ordinary tone of voice to give orders to aeroplanes at a distance of ten or fifteen miles. These, among others, are recent advances made in the laboratories over which Dr. Jewett presides. The research workers in these laboratories number more than three hundred and the expenditure on research for the year 1918 was approximately $2,500,000.

At Wilmington, on the way from New York to Washington, are located the research headquarters of the Dupont Company. Here the annual expenditure on chemical research alone is $2,000,000. Besides this, a certain amount is expended on research in physics and engineering. There are four chemical laboratories, employing in all 290 research workers. Associated with each of these laboratories is an analytical division, whose chemists make analyses and do other routine work for the research chemists, in order that the time of the latter may be spent to best advantage. There are also forty-four chemists who are experts on the different processes in which the Dupont Companies are interested. All told, there are 1,100 chemists employed in various capacities in the works. The total number of employees is 65,000.

The bonus system has been introduced among the research workers and a bonus may run as high as $50,000. The policy



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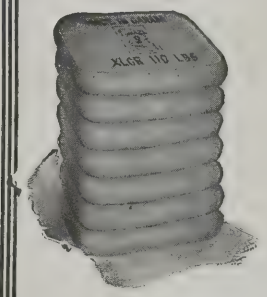
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of the Dupont Companies in this regard is somewhat in contrast with that of a large manufacturing concern, cited by Professor Stieglitz, of Chicago, which added a little over $200 a year to the salary of the Director of its research work for a device of his which netted the company a profit of $80,000 annually.

Another great research establishment whose upkeep for the year 1918 cost $2,000,000 is the Bureau of Standards maintained by the Federal Government in Washington, D.C. Besides the current expenditure just indicated $1,500,000 was being expended on new buildings. At the time of my visit there were 785 research men employed in the laboratories, besides which there were 75 men in the field. Of the 785 men here referred to, 300 had been detailed to do research work and were in uniform. I was told that about 600 problems a month were presented to the Bureau of Standards by the military services alone. Practically all the work of the Bureau last year had a bearing on the war. Of the problems handled 65 per cent. were direct war problems. The remaining 35 per cent. had an indirect bearing on the war.

Confidential reports were issued in bulletin form several times a month. These were sent to a limited number of persons, all of whom, with a few exceptions, were heads of military, naval or aeronautical departments or organizations. Each bulletin indicated in a general way the progress made on a number of problems.

The Bureau of Mines is also a federal institution whose activities are largely those of research. Its appropriation jumped from $1,250,000 in 1917 to $8,000,000 in 1918. Nearly all of the latter sum has been spent in connection with the gas warfare service. The Bureau had begun its investigations in connection with the gas warfare in February, 1917, that is to say, before the United States declared war. Its first investigations had to do with gas masks. These were later extended so as to include all sorts of materials and apparatus employed in gas warfare. It collaborated with the National Research Council, the universities and other bodies, as also with individuals. When in June, 1918, the Chemical Warfare Service of the National Army was formed, and the War Department took charge of the work which the Bureau of Mines had been doing in connection with gas warfare, the Bureau was able to turn over to the Department a complete organization, with a personnel numbering 1,800. This included a corps of 700 chemists.

The Bureau of Mines conducts investigations on metallurgical problems, on lignites, on the composition of coal and on its utilization. It studies, in fact, everything connected with mining. It has, for instance, done a great deal of experimental work on the flotation process for treating ores. It does work on the technology of petroleum and natural gas. The methods employed in obtaining oil have been very wasteful. For example, in Oklahoma oil has been obtained under circumstances which would mean a loss of $75,000 worth of natural fuel gas for $25,000 worth of oil recovered. In one field of Oklahoma, it has been estimated that the waste of fuel gas in one year was equivalent to 5,500,000 tons of coal. A very large proportion of this waste can be eliminated, as the Bureau of Mines has shown, by employing what is called the mud laden fluid method. A very large proportion of the oil, too, from 30 per cent. to 90 per cent., is left in the ground. If it is able to cause the adoption of practices whereby the production is increased 10 per cent., the Bureau of Mines estimates that the ultimate aggregate saving to the country will be $450,000,000.

It would appear that the time is not so remote when the United States will have to look to its shales as a source of supply for oil. The Bureau of Mines has been studying processes for recovering oil from this source.

The Bureau of Mines has been instrumental in effecting a great saving in the by-products of coke. The United States

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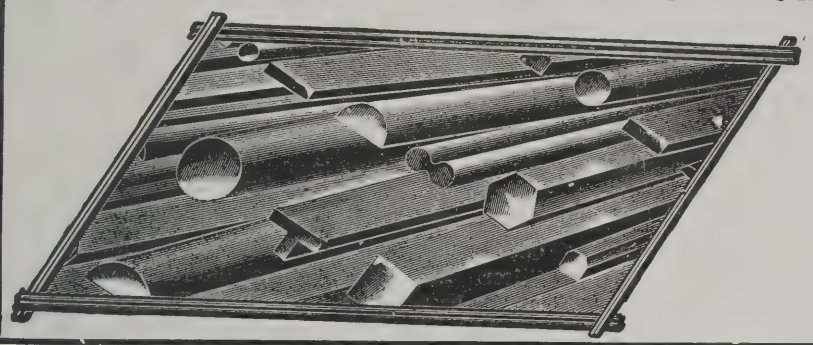
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had been wasting $50,000,000 a year by using the beehive oven instead of the by-product oven in the coking of coal. A great change due to the war, came about in 1917 during which year 22,600,000 tons of coke came from by-product ovens. This amount was greatly increased in 1918. During the latter year according to the Director of the Bureau of Mines the by-product ovens in operation were expected to produce 5,000,000 more tons of coke than if the coal had been coked by the beehive process. Furthermore he estimated that these ovens in full operation would produce 315,000,000 gallons of tar which could be used in the arts on which as a fuel would have the same efficiency as fuel oil. He also pointed out that they are capable of yielding 168,000,000 feet of gas or sufficient to melt 12,000,000 tons of steel in open-hearth furnaces. The by-products here in question have been of immense importance in the production of explosives for the war. They have made it possible too to establish the great American dyestuffs industry.

As a result of the war the American Government developed temporarily into the greatest manufacturer of chemicals in the world. Its appropriations for nitrate and sulphuric acid plants have run into the hundreds of millions. It has been suggested that the products of some of these plants be now utilized for the manufacture of fertilizers. In this connection one might remark that it has been stated on good authority that a reduction of the cost of soluble nitrogen compounds to a price comparable with that prevailing in Germany before the war would add $1,000,000,000 to the annual value of crops of the United States.

The Fertilizer Question

The National Research Council has interested itself in the fertilizer question. It is felt that the farmer should be taught to use fertilizer. In the past however the fertilizer companies have not always been fair to the farmer. They have sold him constituents which were in many cases superfluous for his land. To remedy this abuse, the National Research Council has, with the concurrence of the Fertilizers' Association, organized a commission of five scientific men who will be paid by the Association. This commission, in co-operation with the individual States, will undertake a survey of lands in the Middle West with a view to determining the specific needs of the soils in different parts of that region.

It might be well to here say something more about the National Research Council, as it is an organization of comparatively recent date which has already abundantly justified its existence and which promises to exercise an immense influence on scientific and industrial research and on the intellectual life of the country in general.

"In April, 1916, immediately after the attack on the *Sussex*, the National Academy of Sciences voted to offer to the President its services in organizing the scientific resources of the country. This offer was accepted, and the Academy was requested to secure the co-operation of all agencies Governmental, Educational and Industrial, in which research facilities are available. The National Research Council, comprising the chiefs of the technical bureaus of the Army and Navy, the heads of Government Bureaus engaged in scientific research, a group of investigators representing educational institutions, and research foundations, and another group including representatives of industrial and engineering research, was accordingly constituted by the Academy with the active co-operation of the leading national scientific and engineering societies. To these were added representatives of the Government designated by the President."

Early in 1917 the National Research Council was requested to act as the Department of Science and Research of the Council of National Defence. On May 11th, 1918, the President of the United States issued an executive order in which he commended the work of the National Research Council and requested the National Academy of Sciences to perpetuate its

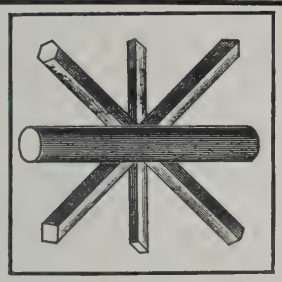


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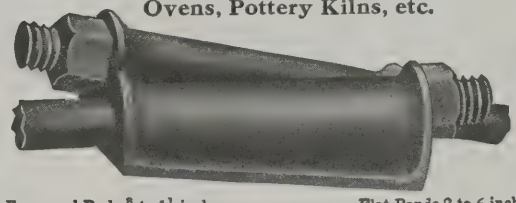
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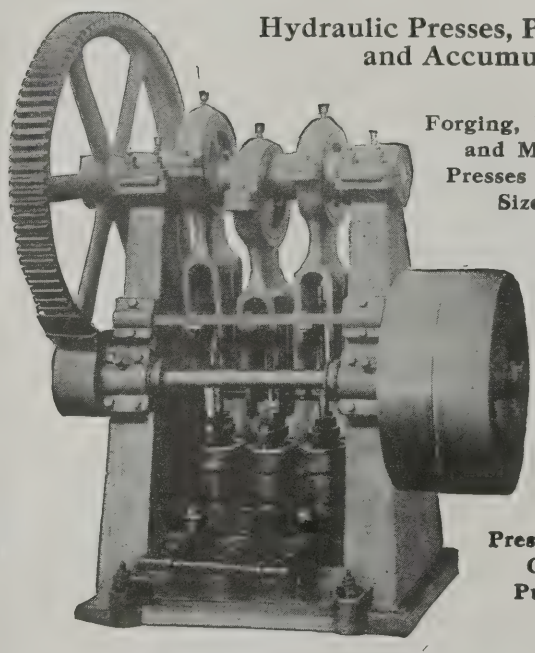
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organization. At the same time he specified its functions as follows:

(1) In general, to stimulate research in the mathematical, physical and biological sciences, and in the application of these sciences to engineering, agricultural, medicine and other useful arts, with the object of increasing knowledge, of strengthening the national defence and of contributing in other ways to the public welfare.

(2) To survey the larger possibilities of science, to formulate comprehensive projects of research, and to develop effective means of utilizing the scientific and technical resources of the country for dealing with these projects.

(3) To promote co-operation in research at home and abroad, in order to secure concentration of effort, minimize duplication, and stimulate progress; but in all co-operative undertakings to give encouragement to individual initiative, as fundamentally important to the advancement of science.

(4) To serve as a means of bringing American and foreign investigators into active co-operation with the scientific and technical services of the war and navy departments and with those of the civil branches of the Government.

(5) To direct the attention of scientific and technical investigators to the present importance of military and industrial problems in connection with the war, and to aid in the solution of these problems by organizing specific researches.

(6) To gather and collate scientific and technical information at home and abroad, in co-operation with Governmental and other agencies and to render such information available to duly accredited persons.

Under its war organization the National Research Council counted more than one hundred members. It had as officers a chairman, three vice-chairmen, a treasurer, an executive secretary, and two assistant secretaries. With these was associated an executive board. The Council worked through eight so-called *Divisions*. The chairmen and vice-chairmen of these divisions were members of the Council. This however was not the case with the great majority of the members of the Divisions.

The territories covered by the activities of the several Divisions are more or less vaguely suggested by their titles, as follows: (1) General Relations, (2) Military, (3) Engineering, (4) Physics, Mathematics, Astronomy and Geophysics, (5) Chemistry and Chemical Technology, (6) Geology and Geography, (7) Medicine and Related Sciences, (8) Agriculture, Botany, Forestry, Zoology, and Fisheries. Under Division (1) are included foreign relations, relations with educational institutions, industrial research, reconstruction problems, etc. Division (2) includes the Research Information Service. This service has branches attached to the embassies in London, Paris and Rome. The appointment of a scientific attaché to an embassy is an innovation for which the National Research Council is responsible. The departure has, however, been amply justified and the office is likely to be made a permanent institution. One of the functions of a scientific attaché is to keep headquarters at Washington informed on all scientific developments which take place in the country to which his embassy is accredited. Another is to place American army and navy officers in his vicinity in a position to obtain any scientific information which they may require.

The Natonal Research Council has utilized workers in all branches of science. The laymen would hardly expect results of military value from an astronomer. Yet a remarkably expeditious method of reducing observations made in sound-ranging is due to a Princeton astronomer who has been working under the auspices of the National Research Council. Astronomers in the United States have also made important discoveries relating to the trajectories of projectiles and the dropping of bombs, and an American astronomer is said to



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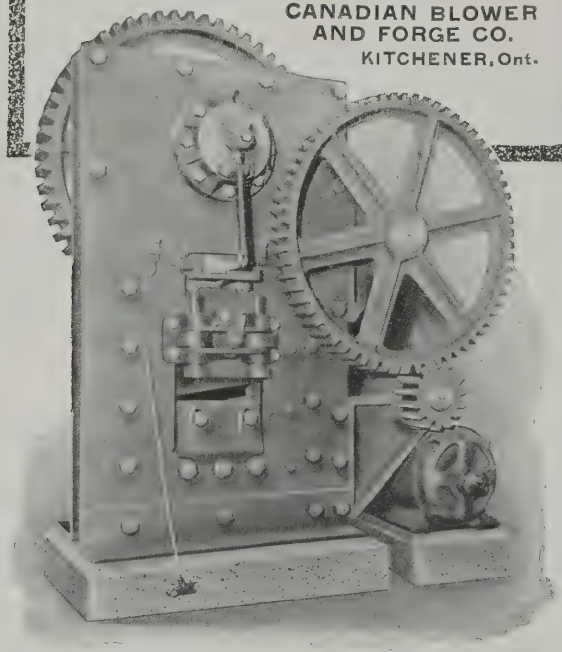
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Another surprise for the layman is to be found in the effective war service rendered by the psychologists. At the suggestion of the National Research Council a psychological examination of the troops was undertaken. This proved a great success and sufficed in many cases to determine in advance that it would be impossible to fit a man for a given post.

Until the close of hostilities the activities of the National Research Council were almost wholly absorbed by matters relating directly to the war. It is now reorganizing and has already adopted a new constitution under which, among other changes, a modified classification of Divisions has been introduced. In the new arrangement the Divisions are grouped into two classes A and B. The Divisions in these classes are as follows:

A. Divisions of general relations: (1) Government Division. (2) Foreign Relations. (3) States Relations. (4) Educational Relations. (5) Industrial Relations. (6) Research Information Service.

B. Divisions of science and technology: (7) Physical Sciences. (8) Engineering. (9) Chemistry and Chemical Technology: (10) Geology and Geography. (11) Medical Sciences. (12) Biology and Agriculture. (13) Anthropology and Psychology.

We shall not here go into detail with regard to other changes in the Constitution of the Council. Its peace plans are not as yet completely defined. Whatever shape they may take however there is reason to believe that the necessary funds will be forthcoming from other than Government sources. Before the close of the war it was already planning an extensive campaign for the promotion of industrial research. In this it was to receive the support of some of the most prominent commercial and industrial men in the country as well as of men in the scientific and technological professions. On his visit to Toronto already referred to, Dr. F. B. Jewett informed us that the National Research Council is now proposing that the leading universities found research professorships. He also told us something about the generous dimensions of the research fellowships which the Council intends to establish, the necessary funds thereto being furnished by corporations which have benefited by research. Last year the National Research Council received $122,000 from President Wilson out of the fund of $100,000,000 which was voted to him by Congress to dispose of as he deemed best for the national security and defence. Financial aid to the extent of $50,000 was furnished by the Rockefeller Institute and the Carnegie Corporation of New York contributed $100,000.

As a sign of the times it may be noted that one of the largest corporations in the United States has under consideration a project for establishing a graduate school in connection with its laboratories where selected students on fellowships would be trained in research methods and whence later on the brightest among them would be drafted into well-paid positions in the Company's research department.

It may be pointed out that at a meeting of representatives of National Academies held in the rooms of the Royal Society at London in October last it was proposed that each of the allied countries should have a National Research Council and it was furthermore suggested that there should be an International Research Council made up of representatives from the several National Research Councils. What would Canada's part be in such a scheme? Is Canada doing all that she should do in the matter of research? A prominent American scientist in conversation with the writer stated that Canada should be doing as much research as the United States actually is doing and that the United States should be doing ten times as much as she is doing. If this statement is correct Canada's multiplier would be considerably in excess of ten.



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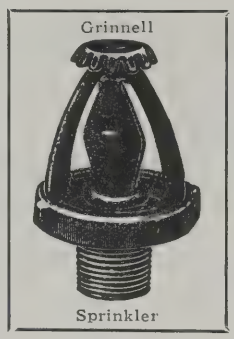
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(From the Bureau of Statistics Report.)

The report on the pulp and paper industry of Canada in the Census of Industry series, just issued by the Dominion Bureau of Statistics, shows a considerable growth when the statistics in the present report are compared with those of 1915.

In 1915 the number of active mills was 80, and the value of production $40,348,001. In 1917 there were 83 mills in operation, with a production of $96,340,327, an increase in the latter year of nearly 140 per cent., as shown in the report.

Another important measure of growth, according to the report, is found in the consumption of pulpwood, which in 1915 was 1,405,836, and in 1917 was 2,104,334 cords, or an increase of nearly 50 per cent. during the same period. The total cut of pulpwood was 2,355,550 cords in 1915 and 3,122,188 cords in 1917, exports of pulpwood having risen from 949,714 cords in 1915, to 1,017,854 cords in 1917.

The production of wood-pulp in Canada in 1917 in all classes of mills amounted to 1,464,308 tons, compared with 1,296,084 tons in 1916, and 1,074,805 tons in 1915. Of the 1917 product, 804,472 tons were used by the producing mills in the manufacture of paper, while 659,836 tons were made for sale. The amount received for pulp sold was $32,824,626, or an average price per ton for all classes of pulp of $49.75. The average value of the different kinds of pulp made for sale was $28.06 for ground wood, $72.31 for sulphite fibre, and $68.26 for sulphate fibre. The export price of mechanical or ground wood pulp in 1917 was $28.32, and of chemical pulp, $73.01. The value of the entire output of wood pulp, if calculated at the average price per ton realized for that portion which was sold, would be $72,849,323.

Raw Materials

The consumption of pulpwood in all mills making pulp, whether purchased or cut from own limits, was 2,104,334 cords, of the value of $18,817,483, in 1917, as compared with 1,764,912 cords, valued at $13,104,458, in 1916, and 1,405,836 cords, valued at $9,426,217, in 1915, or an increase of 688,498 cords, or nearly 49.7 per cent. in the two-year period. The average price per cord was $6.71 in 1915, $7.42 in 1916, and $8.94 in 1917, an increase of $2.23 per cord, or nearly 33.2 per cent. in the two years.

The order of importance of the five provinces remained the same as in 1916, Quebec leading with 1,109,869 cords, or over half the total. Ontario was second with 735,691 cords, or over a third of the total. British Columbia was third with 134,814 cords, New Brunswick fourth with 105,586 cords, and Nova Scotia last with 18,374 cords. The quantity of pulpwood consumed in each province is an increase in every case, as is the average value per cord of wood.

Spruce continues to lead all classes of wood, being 79.7 per cent. of the total in 1917, balsam fir and hemlock being next in order of importance. These three woods all show increases from 1916. Poplar and pine show decreases from the preceding year, and tamarack and cedar are reported from British Columbia for the first time in several years.

The greatest proportion of the wood used still goes into the manufacture of ground wood-pulp, although the three



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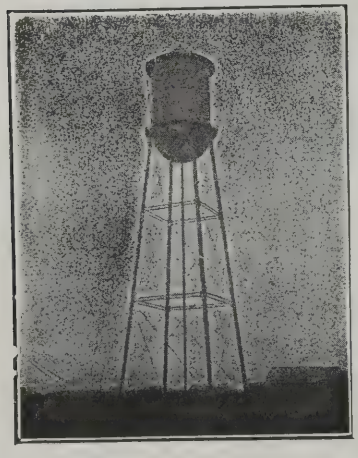
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JAMES P. BYRNE . . . . . Secretary
M. B. ROBINSON . . . . . Asst. Secretary

chemical processes are making heavier demands on the wood supply each year. In 1915, 52.9 per cent. of the wood was used in making ground wood-pulp. In 1916 this proportion decreased to 46.9 per cent., and a further decrease to 45.8 per cent. is recorded for 1917. The increase in the proportion of wood used for the manufacture of chemical pulp does not represent an equal increase in the production of pulp by these methods. Where over a ton of pulp per cord of wood is produced on the average by the mechanical process, only 1,105 pounds are produced by the sulphate process, 1,063 by the sulphite process, and only 930 pounds by the soda process.

The Mechanical Process

The mechanical process does not demand the use of the most expensive grades of wood, and the average value, $8.07 per cord, is therefore the lowest on the list. Certain species, such as jack pine, which cannot be used to advantage in other processes, are useful in making kraft pulp, and the average value of wood used in the sulphate process, $8.10 per cord, is also low. The best quality of pulpwood goes into the manufacture of sulphite at $10.18, and soda pulp at $10.07 per cord.

For the mechanical process the highest average number of pounds of pulp produced per cord of wood was 2,305 in British Columbia, and the lowest 1,818 in Nova Scotia, the average for the Dominion being 2,043 pounds per cord. By the sulphite process in the manufacture of paper the highest average, 1,137 pounds, is again found in British Columbia, and lowest, 961 pounds, in Ontario, the average for the Dominion being 1,063 pounds. The sulphate process shows highest in Ontario with 1,176 pounds and lowest in Quebec with 1,063 pounds, the average for the Dominion being 1,105 pounds. The soda process shows the lowest production, viz., 930 pounds per cord.

The quantity and value of pulp used in the manufacture of paper, whether produced or purchased, includes ground wood, 617,029 tons, with a cost valuation of $9,984,597; sulphite fibre, 239,129 tons, valued at $10,613,617; sulphate fibre, 28,822 tons, valued at $1,773,029; and soda fibre, 6,001 tons, of a value of $448,746. The value of other materials used, such as rags, old or waste paper, alum, etc., was $5,797,445. The total cost of all materials used was $28,617,434.

Capital Invested

The report shows a total capital investment of $186,787,405, of which $84,609,584 was in Quebec, $72,006,972 in Ontario, and $22,584,652 in British Columbia. Land and buildings represent an investment of $84,461,837, machinery of $59,266,596, whilst working capital was $15,156,506.

Over 76 per cent. of the total investment is in the class of combined mills, 19 per cent. in mills producing pulp only, and nearly 5 per cent. in mills making paper only.

Each province shows an increase in capital over 1915 except Nova Scotia, where the decrease amounted to $199,030. British Columbia's capital investment rose from $8,344,416 in 1915 to $22,584,652 in 1917; New Brunswick from $3,927,858 to $7,136,277; Ontario from $57,173,623 to $72,006,972, and Quebec from $63,641,956 to $84,609,584.

The average total capital invested in pulp mills was $1,057,610; in pulp and paper mills, $6,192,365; and in paper mills, $323,241.

The total yearly capacity of mills making ground wood-pulp in the Dominion was 1,088,431 tons, dry weight, of which Quebec's equipment represented 601,436 tons or 55.2 per cent. Ontario represented 357,250 tons, or 32.8 per cent., followed by British Columbia with 100,600 tons, or 9.2 per

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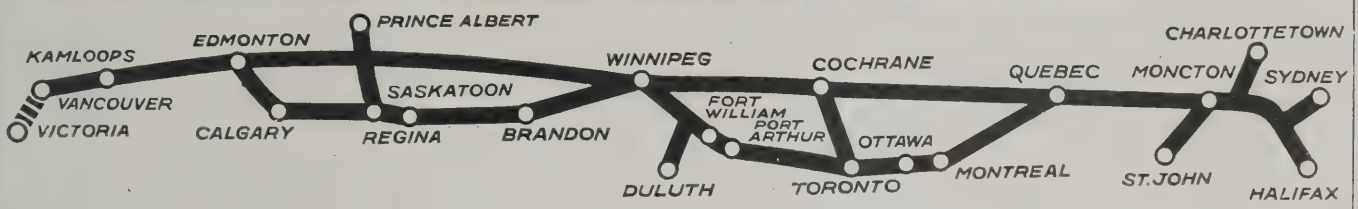
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cent., New Brunswick with 21,145 tons, or 19 per cent., and Nova Scotia with 8,000 tons, or less than one per cent. The actual output of ground wood-pulp in 1917 was 923,731 tons.

The quantities and values of the different kinds of paper products are shown by the following table:

	Tons.	Value.
Newsprint paper	689,847	$38,868,084
Book and writing paper	48,141	9,310,138
Wrapping paper	50,360	5,646,750
Boards	54,080	3,543,164
Other paper products	11,261	1,487,122
All other products (value only)	.....	3,438,107

The average value per ton for each group was as follows: Newsprint, $56.35; book and writing papers, $193.40; wrapping paper, $112.12; boards, $65.50; and other paper products, $132.06.

Capital investment in pulp and paper mills for the years mentioned are summarized in the report as follows:

	1915.	1917.	Increase.
Land, buildings and fixtures	$74,383,608	$84,461,837	$10,078,229
Machinery and tools	31,856,265	59,266,596	27,410,331
Materials on hand, stocks in process, etc.	17,254,317	27,902,466	10,648,149
Cash, trading and operating accounts, etc.	10,242,613	15,156,506	4,913,893
Totals	$133,736,803	$186,787,405	$53,050,602

Imports and Exports

The total quantity of wood pulp exported in 1917 was 511,803 tons, of the value of $26,129,906, of which 250,043 tons, valued at $7,082,206, was mechanical, and 261,760 tons, valued at $19,110,700, was chemical pulp. There was a decided falling off in the exports of mechanical pulp, amounting to 79,709 tons, though the value shows an increase of $1,432,841. On the other hand, there was a marked increase in the export of chemical pulp, amounting to 32,613 tons, and a correspondingly marked increase in the value amounting to $7,415,823. More than 92.5 per cent. of the quantity and 88 per cent. of the value of all pulp was exported to the United States. The average value per ton for all kinds of pulp exported was $51.17 in 1917, as compared with $31.03 in 1916, and $25.48 in 1915. Mechanical pulp rose from $15.67 per ton in 1915 to $17.13 in 1916, and $28.32 in 1917. Chemical pulp, which was 38.36 per ton in 1915, rose to $51.04 in 1916, and $73.01 in 1917.

Increase in Paper Imports

No pulpwood is imported into Canada.

The total value of paper imported increased from $2,402,557 in 1915 to $4,204,968 in 1917. The total value of paper exported in 1915 was $18,430,013, while the total value exported in 1917 was $35,774,636. That is, our imports of paper in 1917 increased in value over those of 1915 by $1,802,411, or by 75 per cent., while our exports of paper in the same period increased by $17,344,623, or by 94.1 per cent.

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Issued monthly as the official publication of the Canadian Manufacturers Association (Incorporated), and devoted to the advancement of the industrial and commercial prosperity of Canada.

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The CANADIAN MANUFACTURERS ASSOCIATION.

INCORPORATED.

Vol. XX. TORONTO, JULY, 1919 No. 3

Editorial Comment

The President's Membership Appeal

"EVERY one of us must get one more member this year."—President T. P. Howard at the Annual Meeting.

How many will answer the call of the President?

The Head Office of the Association

THE location of the Head Office of the Association was finally determined at the Annual Meeting. Suggestions had been made that it should be moved to Ottawa. In January, however, it was decided by the Executive Council that a Branch Office should be opened in Ottawa, with committee room accommodation for visiting members. This arrangement was considered satisfactory, and there were no dissenting voices when President Howard of Montreal moved that the Head Office should remain in Toronto.

The Annual Meeting

THE Annual Meeting of the Association, held in Toronto on June 10th, 11th and 12th, was one of the most important in the history of the Association. Certainly no Convention ever confronted more difficult problems. They even compared with those of the war. Great as the war difficulties were, we always felt in the bottom of our hearts that we would win the war, but a great many people began to feel during the last few months that the problems of peace held greater promise of disaster than the problems of war. Such people were no doubt unduly pessimistic, and did not rely sufficiently on the good sense of the great majority of the Canadian people. The mental attitude of those at the Annual Meeting was not one of pessimism, nor yet of undue optimism. It was rather one of conviction that Canadians would remain united and, by co-operation, retain and improve the working basis necessary for our national development.

The reports dealt with a large number of important questions, some of which were not unfamiliar and had been the subject of reports for many years. Many questions, however, were new. In the old days, the Annual Meetings were gatherings of business men who were interested chiefly in pursuing their occupations from the Canadian viewpoint. The last few years have changed all this. We have formed a connection with Europe which time will not sever. Canada is no longer provincial. Whether she wants to or not, she has to take part in world affairs. This fact was present in the minds of those who attended the Convention. They felt that now they have to look abroad and pay more attention to international matters and organize their business accordingly.

Increase in the Membership Fees

THE broadening of the activities of the Association, with a consequent enlargement in the staff, in addition to greater operating expenses, necessitated an increase in the fees of members. In order that the revision should be as scientific as possible, the proposal was first considered by the Membership Committee in February last and a schedule approved. The matter was then referred to the Executive Committee, which appointed a Committee of sixteen, drawn from different parts of Canada, to make a report. This Committee met, recommended further increases in addition to those proposed, and reported back to the Executive Committee, which in turn made the necessary recommendation to the Executive Council during its meeting in Montreal in March. Council approved the proposed increases and referred them to the Annual Meeting for final action. The Annual Meeting unanimously endorsed the increases and warmly approved the Council's determination to provide adequate service to the membership.

The Speakers at the Convention

THE Convention was specially fortunate this year in the personnel of the speakers and the vital interest of the topics which they discussed. Mr. Lloyd Harris, Chairman of the Canadian Mission in London, addressed the Convention during one of the business sessions and again at the Annual Dinner. Every word he uttered was of interest to Canadian manufacturers as he told of the struggle that the Canadian Mission had waged in Europe in the endeavor to secure business for Canadians. With him were linked up the efforts of all those representatives

who have been sent overseas since the signing of the armistice, and this co-operation produced results.

Mr. George B. Nicholson, M.P., Chairman of the High Cost of Living Committee, brought fresh from the sessions of the Committee ideas on the labor situation and production and distribution which were intensely interesting to those present.

Mr. W. C. Good, of the United Farmers of Ontario, told how the farmers viewed the present situation and what remedies they proposed for improvement.

Mr. M. A. Brown, Mayor of Medicine Hat and President of the Alberta Industrial Development Association, described the natural resources of Alberta, and urged upon his hearers the claims of Alberta as an industrial Province.

Lieutenant-Governor Brett of Alberta extended an invitation to Canadian manufacturers to attend the Conference of the Alberta Industrial Development Association in August next, and see for themselves the resources of that Province.

All the above addresses are published in this issue and will well repay careful perusal.

Creation of Divisions

THE Annual Meeting endorsed the proposal to create five Divisions of the Association for administrative purposes. These Divisions are:

Maritime Division—Provinces of New Brunswick, Nova Scotia, and Prince Edward Island.
Quebec Division—Province of Quebec.
Ontario Division—Province of Ontario.
Prairie Division—Provinces of Manitoba, Saskatchewan, and Alberta.
Pacific Division—Province of British Columbia.

It is proposed that the Divisions shall deal with matters affecting manufacturers within their territory, leaving the Head Office to deal with matters which will affect members generally throughout Canada. By this arrangement it is hoped that centralized action will be quickly available, and that at the same time local matters will not escape the attention which they deserve.

Attacking the Manufacturers

OUR industrial system at the present time is under heavy fire. It is being attacked by numerous persons and organizations who apparently consider that they have authority to speak accurately of social problems. They forget one point, however. The factories of Canada employ at present about 700,000 people. Estimating that each employee has on the average two dependents, the factories of Canada support directly about 2,000,000 Canadians. These factories therefore enable 2,000,000 Canadians to live in houses, to secure food, clothing and other necessaries and comforts of life. It is also worth noting that in addition to those who are actually employed in factories, and their dependents, probably 3,000,000 Canadians live through their indirect association with the industrial system of Canada.

It is curious, but nevertheless true, that the most bitter opponents of our present industrial system are those who have never employed anybody and who have a most limited knowledge of business. A great many of these people have resurrected economic theories which have been discarded during the past two centuries, and advocate regulating modern industrial life by these models. Considerably over half the people of this country get their living directly or indirectly through the turning of factory wheels, and yet any sensational preacher, agitator or newspaper writer who wants to fill an hour of time or a column of space with invectives, can apparently secure an audience when he attacks the system which enables them to live.

Shorter Hours

THE eight-hour day mentioned by the Peace Conference has been universally considered to be eight hours six days a week, or forty-eight hours in each week. Certain sections of labor, however, show no tendency to be satisfied with this definition of the eight-hour day. In many cases they have demanded that the eight-hour day shall mean a forty-hour week. Before the outbreak at Winnipeg, the six-hour day was openly advocated in various parts of Canada, and a number of irreconcilables still say that they intend to work towards that end. It is almost certain that the mine workers of England will get a seven-hour day, and strong efforts are being made by certain of their leaders to have this reduced in a short time to a six-hour day. Where is it going to end?

High Cost of Living

MANUFACTURERS are getting more than their share of blame for the high cost of living. The manufacturer only performs one function, that of bringing an article to a certain stage of manufacture. In the case of the milling industry, for example, raw material is bought from the farmer, who for some time has been enjoying a fixed price for wheat. When the article is made, the manufacturer sells it to distributors. As a rule he has nothing to do with the distributing process. It must not be forgotten that every step of the many which are required to bring the article from the raw state to the possession of the ultimate consumer, is affected by the constantly rising prices of raw material, caused by world scarcity on account of the war and by the enormous increases in wages. The manufacturers are as helpless in dealing with these two primary causes as any other class of the population.

History shows that wars are succeeded by high prices. It could not be otherwise. Is it strange, then, that this, the greatest of all wars, should be followed by high prices? Over 20,000,000 men have been diverted from their proper occupations of providing food, shelter, clothing, and other articles for five years. An immense amount of material has been wasted. The result is a world-wide scarcity. Until civilization has been re-organized for production, there will be no real relief from the high cost of living. Increased production is the only solution.

Scope of Whitley Plan Councils

THE Whitley Plan, providing for Joint Industrial Councils of employers and employees, which was distributed to the members of the Association some months ago, was made a subject of investigation by the Royal Commission on Industrial Relations, which has just made its report to the Government. The majority of the Commissioners believe that a Joint Industrial Council, or Workers' Committee, should be established in each plant and should consist of a number of employees duly elected and a similar number from the management. They believe that this Council should meet monthly and should deal with the following subjects:

(1) Wage rates.
(2) Hours of labor.
(3) Conditions surrounding a worker in the plant, such as safety, ventilation, light, sanitation, provision for meals, dressing-rooms and shelter.
(4) Child and women labor.
(5) Questions of discipline and conduct as between management and work people.
(6) Conditions surrounding the worker outside the plant, such as education, amusement, recreation, health, housing, apprenticeship, or special training libraries.
(7) Improvement in the plant or process to improve quality, increase production and decrease waste.

The Commission believe that a start should be made by having joint plant councils organize in each industrial plant in Canada, but that no effort should be made towards a more extensive organization of district or national councils until their usefulness becomes apparent.

Combines and Fair Prices Act

THE Dominion Parliament in the last days of the session passed the Combines and Fair Prices Act and the Board of Commerce Act, the latter providing the machinery to administer the former. Apparently this legislation resulted from the sessions of the High Cost of Living Committee of the House of Commons.

The object of the new legislation is to restrain and prohibit the formation and operation of "combines." The expression "combines" means such organizations which it is considered operate, or are likely to operate, to the detriment of the public interest. It does not include combinations of workmen; hence the legislation does not affect the Trade Union Act.

The Board of Commerce, created under the second Act, is empowered to proceed against suspected persons, who must appear before it when summoned, either in person or by counsel.

Any British subject may apply for an order directing an investigation into an alleged combine, the application to be accompanied by a sworn statement.

The Chief Commissioner may of his own motion make an order for an investigation if satisfied that there are reasonable grounds for such action.

When the Board orders an offender to desist action which is considered improper, he must do so. If he fails to obey the order of the Board, he shall be guilty of an indictable offence and shall be liable to a penalty not exceeding $1,000 and costs per day, or to imprisonment for a term not exceeding two years.

In case an owner or holder of a patent issued under the Patent Act uses his right to restrain trade unduly, proceedings may be taken to secure a judgment to revoke the patent.

The Board also has the right to determine what is considered a fair profit upon investigation. When an investigation shows to the satisfaction of the Governor-in-Council that the making of unfair profits on any necessity of life is facilitated by the customs tariff, the Governor-in-Council may direct that such articles be admitted into Canada free of duty. The Board may require the production of books, records and other papers, and may order compulsory attendance of witnesses.

The Board of Commerce is to consist of three Commissioners appointed by the Governor-in-Council, one of them to be Chief Commissioner. The Board is to be a court of record and will have an official seal. Two Commissioners shall form a quorum. An appeal from the position of fact shall lie to the Governor-General. An appeal on a question of law shall lie to the Supreme Court of Canada. The Board does not need to wait until a complaint is lodged with it; it is able to proceed against persons accused of hoarding articles or of combining to enhance prices; or it may refer a case to the Attorney-General of a Province, with the recommendation that criminal proceedings be instituted.

This is extremely drastic legislation. It was rushed through the House of Commons and Senate during the last few days of the session, and consequently the country had practically no time to discuss it. These Acts, however, are now law and must be obeyed by all good citizens. The most important thing about them will be the administration. If they are administered sanely there can be no great objection to such legislation, especially if it will have any real effect on the high cost of living. If the *personnel* of the Board of Commerce is made up of men who have had no business experience, or who are visionaries and theorists, the harm they can do to business is almost incalculable.

Mr. Thomas Findley and the Farmers

"LET any number of you get cattle in the fall and sell them in the spring, and some will make more profit than others," said Mr. Thomas Findley, President of the Massey-Harris Company, to the Huron County farmers at the U.F.O. picnic near Goderich, Ontario, on July 4th.

"It is a mistake to attack profit-making wherever it appears," continued Mr. Findley, "because we hear only of the successful companies and not of the unsuccessful or inefficient companies. There is too much rot talked about profit. It is a factor in the very success of companies in which the public shares too, because by success and competition prices are brought down. It is unfair to inflame the public upon the question of profit, and very often it will be found that those who do it are quite willing that should be the only result for the notoriety it brings. I say

it is dishonest, and want to protest against it in the interests of the industry of the country."

Mr. Findley, dealing with the tariff in regard to agricultural implements, said: "We have got to have revenue, and in my belief the easiest way to get the great bulk of revenue is through the customs tariff."

According to press reports, Mr. Findley was given a great reception.

Most of the farmers of Ontario are sound business men. They know the difference between good and bad management in their own business. The farmer who is a good manager makes good profits; the farmer who is a poor manager does not make any. In tariff matters the great majority of Ontario farmers have been strong advocates of adequate protection for the last forty years. A minority of theorists make considerable noise in advocating free trade, but when the votes are counted the solid sense of the country districts is found behind the national policy.

The Royal Commission on Industrial Relations

THE report of the Royal Commission on Industrial Relations has been published, and arrangements have been made by this Association to have it distributed to all its members. The report consists of a majority report signed by the following Commissioners: T. G. Mathers (Chairman), Carl Riordon, Charles R. Harrison, Tom Moore, and John W. Bruce.

The majority report recommends that legislation be enacted to provide for:

(*a*) Fixing of a minimum wage, especially for women, girls, and unskilled labor;
(*b*) Maximum work-day of eight hours and weekly rest of not less than twenty-four hours.

The majority also recommends immediate inquiry by expert boards into the following subjects, with a view to early legislation:

(*a*) State insurance against unemployment, sickness, invalidity, and old age;
(*b*) Proportional representation.

The majority report also recommends that suitable action be taken by the Government to:

(*a*) Regulate public works to relieve unemployment;
(*b*) Help the building of workers' homes;
(*c*) Establish a bureau for promoting industrial councils;
(*d*) Restore fullest liberty of freedom of speech and press.

Other general recommendations are:

(*a*) That trade unions should be recognized and employees granted the right to organize;
(*b*) The payment of a living wage;
(*c*) Collective bargaining;
(*d*) Extension of equal opportunities in education;
(*e*) Steps towards the establishment of Joint Plant and Industrial Councils;
(*f*) That the findings of the Commission be put into effect in all work controlled by the Government where the principles of democratic management can be applied.

Commissioners Senator Smeaton White and Frank Pauze dissented from the finding of the majority and submitted a minority report. The minority report recommends the encouragement of Industrial Joint Councils as established in some large manufacturing concerns in Canada, and also that, where Industrial Councils are established, employers and employees be urged to institute forms of co-operative insurance or other provision for pensions to long-term employees, sick or invalided. The minority report recommends that the petition of the mine operators of Alberta for the establishment of a local court, where disputes might be referred without loss of time, be considered. The minority report did not favor proportional representation which means, according to the evidence of witnesses appearing before the Commission, that Parliament should be elected in three parts, one-third representing labor, one-third representing agriculture, and the remaining third representing arts, science, professional and other elements of the population. The minority report also recommends that before the Government commits itself to legislation establishing old-age pensions and unemployment insurance, the effect of such legislation upon the ambition and efforts of individual workers should be considered. The minority Commissioners do not believe that the entire Whitley Plan is suitable for Canada, owing to the fact that our industries are dispersed over a very large area, and consequently cannot be grouped for administrative purposes.

"There does not seem to be organization of employers on the same lines as organization of employees," says the minority report. "A number of organizations exist among employers, but generally these organizations are for the purpose of selling or the exchange of views as regards general matters affecting the welfare of their plants. From evidence given before this Commission, and as far as we could learn from inquiry, employers had no organizations for the purpose of enforcing uniform scales of wages or other conditions in their plants to offset the organizations of employees. If it is the intention of the Government to encourage organization of trade unions, organization of employers should also be encouraged, that both parties may meet with at least, comparatively speaking, equal comprehensiveness."

The minority report also believes that piece-work under certain conditions is beneficial to employees, especially when they are allowed to take it to their homes.

"We are pleased to report," say the minority Commissioners, "that the behavior of the returned soldier, individually or as a class, has not been a cause of complaint before this Commission."

Both reports speak optimistically of the resources and future of the country. The majority report says: "Your Commissioners desire to say that they have had a unique opportunity of observing manufacturing, mining and agricultural resources of this country. They were impressed by the variety, magnitude, and character of many of the agricultural and industrial plants visited, and by the enterprise displayed in their operation. What is required to make the Dominion great and prosperous, and its population contented and happy, is a spirit of co-operation on fair and equitable lines among all classes."

On the same subject the minority report says: "The variety and extent of industries in Canada has been a matter of surprise to your Commissioners, and it is with satisfaction that we note many of those industries are of new creation during the last few years, while many others have enlarged their plants to fill the demands for their goods."

1919 CONVENTION PROCEEDINGS

In the following pages readers of INDUSTRIAL CANADA will find a full report of the proceedings at the Annual Meeting of the Association held in Toronto on June 10, 11 and 12, 1919. This has been arranged in the order in which the various items of business came up for consideration, but for the greater convenience of our readers, and for easy reference purposes, the following index is here inserted :

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A Survey of the Association's Administration

What the Various Departments and Branches have Accomplished during the Year —Growth of the Membership—Changes Among the Officers—Opening of the Ottawa Office—Formation of Divisions and Establishment of New Branches

By J. E. WALSH

General Manager, Canadian Manufacturers Association

IN this report it is proposed to give a survey of the administration of the Association during the past year, with brief references to staff changes and to the most important activities of the departments and branches.

Transportation Department

On my appointment as General Manager of the Association, by approval of the Executive Committee, Mr. S. B. Brown, who has been in the service of the Association since 1912, and is familiar with the policies of the Association, was placed in charge of the Transportation Department. It was arranged, however, that I should continue to exercise special supervision over transportation matters, and appear at all sittings of the Railway Commission.

During the year the Department has dealt with a large number of matters, the most important of which are: Steamship Service, Ocean Rates, General Increase of 25 per cent. in Freight Rates, Milling-in-Transit, Stop-off Charge on Lumber, Demurrage, Switching, Weighing, Siding Agreements, Express Rates, Classification, Telephone Rates, Credit Arrangements.

It is worthy of mention that the Department handled claims amounting to $40,514.22 during the year, of which $11,850.73 was collected, and $18,812.75 is still under negotiation.

At the request of the Pulp and Paper Association, a traffic officer has been located at the head office and works in co-operation with our Transportation Department. His salary is paid by the Pulp and Paper Association.

Tariff Department

The Tariff Department has passed through an especially heavy year, owing to the extra work created by war embargoes, proposed Imperial preferential trade, and the agitation for lower tariffs.

As it has been announced that a Government enquiry into the tariff will be made shortly, and that all those interested will be asked to state their views in regard to tariff legislation, it is evident that the Tariff Department will have to undertake an immense amount of additional work and responsibility. The Executive Council has already authorized the engagement of an assistant for the Department, as soon as a suitable man can be found. It is proposed to make a very thorough survey and investigation into the tariff schedules, to ensure that the views of manufacturers will be brought to the attention of the investigating commission.

Commercial Intelligence

Following the instructions of the Executive Committee, work on the 1919 edition of the *Canadian Trade Index* is well under way. As this book is only published once every three years, the task of bringing it up-to-date is a heavy one, especially on this occasion, owing to the numerous changes in manufacturing companies and the lists of their products, as a result of the war.

The editorial work is under the supervision of Mr. A. Marshall, Manager of the Commercial Intelligence Department, while the necessary advertising is being secured by Mr. D. B. Gillies, Advertising Manager of INDUSTRIAL CANADA. It can be now confidently stated that the 1919 edition will be larger than any previous edition; that it will contain a more complete classification of Canadian products; that it will be given wider distribution, and that it will be published at a profit to the Association.

The Commercial Intelligence Department has also done a great deal of work in co-operation with the Canadian Trade Commission and in distributing items of commercial intelligence among members. It is advisable to appoint a special standing committee to supervise the work of this Department, which has increased greatly in importance during the last few years.

Trade Sections Department

There are now 35 trade sections of the Association; seventeen of these may be considered as active, and meet more or less frequently in the Association's offices; four of them are inactive and the remaining fourteen have separate staffs and officers and carry on their work almost entirely independent of this Association.

It was decided to create a Trade Sections Department for the purpose of encouraging the organization and development of trade sections and keeping these sections in close touch with the departments of the Association. Mr. J. M. McIntosh, who has been in the service of the Association since 1912, has been appointed manager, and will devote his entire time to this work.

Publishing

Considerable attention has been given to the necessity of presenting to the public the views of the Association on matters of great importance. When necessary, during the past year, statements have been prepared, approved by a competent committee, and published. The appointment of a special committee, known as the "Publishing Committee," will be recommended at the last business session. This Committee would supervise any article, statement or publication issued in the name of the Association.

Legal Department

The Legal Department of the Association has been revived and placed under Mr. H. Macdonald, Secretary of the Department. It is proposed that all correspondence on legal matters should be addressed to the head office and should be placed before the Legislation Committee. When necessary, instructions will be issued to properly qualified counsel, to appear

in the courts and before Parliamentary committees, or sittings of special commissions.

During the year the Secretary of the Legal Department has examined the Bills introduced in the various Legislatures, federal and provincial, during last session, as follows: Senate 20, Commons 60, Ontario 180, Manitoba 20, Saskatchewan 110, British Columbia 78; total, 468 Bills.

Ottawa Office

The establishment of the Ottawa office meets a long-felt want of the Association. Heretofore, it was necessary either to make special trips to Ottawa to secure information from various Government Departments, or to depend upon correspondence, which was not always satisfactory.

Mr. G. M. Murray, former General Secretary, opened the office and has been in charge of it from the beginning. An assistant, Mr. E. Blake Robertson, formerly Assistant Superintendent of the Department of Immigration, has been engaged; and, speaking from an administrative standpoint only, the Ottawa office has been of the greatest possible assistance to the head office, and there is every reason to believe that it will become increasingly valuable in the future.

Insurance Department

Willis, Faber & Co. of Ontario, Limited, are responsible for the Insurance Department of the Association. This Department was consulted last year by 190 members, and services were rendered on 294 occasions.

General Secretary

Mr. J. T. Stirrett, who has been in the employ of the Association since 1912, was appointed General Secretary in February last. The General Secretary is in charge of the secretarial work of the Association.

Travelling Representatives

The appointment of travelling representatives of the Association has been considered several times in the past, but abandoned owing to the lack of revenue. It would be advisable to have a representative travelling constantly through Eastern Canada, and another through Western Canada, if the necessary funds can be provided. These representatives would keep in personal touch with the members, try to secure new members, collect arrears in membership fees, receive, adjust or forward complaints, collect general information for the departments, and make weekly reports to the head office. It is estimated that the cost of maintaining travelling representatives could be largely counterbalanced by the increase in revenue from the fees of new members.

Employees on Staff

The number of employees on the staff of the Association at April 30th, 1918, was thirty-four, representing at that time a yearly salary list of $60,019.80; owing to additions of six employees in the past year to the permanent staff, it now stands at forty. Fourteen of this number are employed outside of head office. The staff at the present time, including temporary help on the *Canadian Trade Index*, consists of forty-four, representing an annual salary list of $81,804.00.

Proposed Divisions

The proposal of Council, which will be given in detail in the Executive Committee report, to group the Association for administrative purposes into five divisions should lessen the congestion of work at the head office and stimulate local interest regarding industrial matters.

New Branches

During the year new branches have been formed at Sherbrooke, Quebec; Brantford, Ontario; Niagara Falls, Ontario; and Victoria, British Columbia. In every case, the formation of new branches resulted in a substantial increase in the membership of the Association. The organizing spirits who contributed chiefly to these gratifying results were: Mr. Geo. D. McKinnon, Sherbrooke; Mr. C. A. Waterous, Brantford; Mr. M. R. Meldrum, Niagara Falls, and Mr. S. Tomlin, Vancouver.



J. E. WALSH
General Manager, Canadian Manufacturers Association

Membership

During the year, a steady membership campaign has been maintained, with the result that the net gain in membership is 141, making the total membership of the Association now 3,530. It is estimated that there are about 1,500 manufacturers eligible for membership, who have not yet joined the Association. For many years membership work has been directed against this non-members' list. It is now being revised with the assistance of the branch secretaries, and it is proposed to ask the secretaries to devote special attention to securing new members in their territory. The most effective membership work is done by present members, who are constantly meeting non-members in business, and it is respectfully suggested that it should be the aim of manufacturers in any community to see that all manufacturers in that community are members of this Association, because, under the present situation, members pay to secure results which benefit all manufacturers whether members or not.

Toronto Branch

The membership of the Toronto branch shows a net increase of fourteen for the year, making a present total of 833. During the year the Branch Executive held eight regular and twenty-two special meetings to deal with the extraordinary amount of work which the unsettled conditions created. In addition to the usual work arising out of departmental activities and local conditions, the branch organized

a special meeting of Ontario manufacturers to consider the creation of an Ontario division, a proposal which was unanimously endorsed.

Montreal Branch

The membership of the branch is now 604, showing a net increase for the year of thirty-four. Only ten resignations were received during the year and all were due to discontinuance of business. The Legislation Committee was particularly active. Under the general heading of Industrial Reconstruction and Development, many problems received close attention from all the branch committees. Other subjects receiving attention were: Publicity, technical education, transportation and industrial research. The proposal to organize a Quebec division was endorsed and arrangements are tentatively made to proceed with the necessary organization if the proposal secures the approval of this meeting.

Prairie Provinces Branch

The Prairie Provinces branch, comprising Manitoba, Saskatchewan and Alberta, has made remarkable progress during recent years. The membership now stands at 498, and local sub-branches have been established in the principal industrial communities throughout the territory. Unusual difficulties were encountered this year. The outbreak which came to a head three weeks ago in Winnipeg had been gathering momentum since last fall, and the energies of the branch executive and members were constantly exerted to combat the sinister influences which had been at work long before their presence was realized by the public.

In spite of the demands made upon their time by this problem, the branch devoted considerable attention to transportation, research, workmen's compensation, and other subjects with satisfactory results.

It is of the utmost importance that the organization of the Association should be extended and strengthened in the three Prairie provinces, where some of the most difficult problems originate, and if this is done thoroughly and wisely, I am certain that the results will justify such action.

Hamilton Branch

The membership of the Hamilton branch is now 215. During the year the branch devoted special attention to labor questions, the tariff, industrial research, export trade and technical education.

British Columbia Branch

Excellent progress is reported from British Columbia. A year ago our membership in that province was 59. During the past year fifty-five manufacturers, representing practically every class of industry, have been added to the membership of the Association, which has now reached a total of 114 for the province. Two months ago the British Columbia secretary organized the Victoria and Vancouver Island section of the Association, with good results to our membership.

During the year the following subjects were discussed and the necessary action taken: railway construction, freight credits, harbor development, freight classification, steamship service, shipbuilding, workmen's compensation, technical education, and industrial conditions.

Through the efforts of our British Columbia organization, the prestige and influence of the Association is steadily increasing throughout the province.

Maritime Provinces Branch

The membership of the Maritime Provinces' branch increased last year by about 25 per cent. Among the subjects dealt with were: The promotion of research guilds, the prevention of fire-waste, the development of water power, industrial education, provincial subsidies, and industrial relations. The Maritime Canned Fish Section and the Maritime Box and Box Shook Section were organized. An Accident Prevention Association was formed in Nova Scotia, and a similar organization is being considered for New Brunswick.

Opportunities in the Orient

On page 280 of this issue readers will find an article dealing with trade opportunities in the Orient, which is worth the attention of those desirous of engaging in export trade. If Canadian manufacturers are alive to the possibilities, Canada can do business across the Pacific. But manufacturers must be prepared to meet world competition, which, of course, means close figuring. The volume is huge, orders are large, but profits are small. Every care must be used in executing orders "to the letter," and packing must have as great care as the manufacture of the goods. If Canadian manufacturers are not willing to devote this care and thought to the business, they should not attempt it, as their indifference will only injure the standing of Canada.

Conference of Branch Secretaries

It is essential that there should be the closest co-operation between the branch secretaries and the head office. Last year a conference of branch secretaries was held at the head office, following the annual convention, and a similar conference will be held again this year. About two months ago the secretaries were notified that they would be called to head office for the convention and that they would remain a week afterwards. They were also instructed to prepare a budget of enquiries and any matters which they wished to discuss. At the same time the heads of departments have prepared lists of subjects which they wish to discuss with the secretaries. When the secretaries return to their respective offices, they will lay these suggestions and plans before their respective executive committees for consideration and the necessary action.

Under orders of council, instructions and suggestions were sent to branches in regard to dealing with the repatriation of returned soldiers, the formation of joint standing labor committees, the tariff agitation, the sittings of the Royal Commission on Industrial Relations, and a number of other subjects. It is gratifying to report that the team-work between the branches and the head office was of a most satisfactory character.

During the coming year, considerable intensive organization should be undertaken. Details are being worked out and will be presented later to competent committees for approval.

All of which is respectfully submitted,

J. E. WALSH,
General Manager.

Report Adopted

The adoption of the General Manager's report was moved by Mr. T. P. Howard, of Montreal; seconded by Mr. J. F. Ellis, of Toronto. The President put the motion which, on a vote having been taken, was carried and the General Manager's report declared adopted. There was no discussion on the report.

Executive Committee Outlines Its Work

Need for Increased Revenue is Explained—Proposed Formation of Divisions—Conference with Western Grain Growers—The Handling of Labor Problems—Proposals of the Committee Endorsed by the Executive Council During the Year

Report Presented by

J. E. WALSH

General Manager, Canadian Manufacturers' Association

DURING the past year your Committee have been confronted with unexpected financial problems, which taxed the resourses of the Association, and, in dealing with these problems, it was assumed that their first duty was to provide service to the Association.

Your Committee report a gross deficit this year of $13,520.44, representing the difference between the total expenditures for the year, amounting to $97,987.96, and the total income from membership fees, amounting to $84,467.52. This gross deficit is reduced by the profits from INDUSTRIAL CANADA, amounting to $8,636.62, the interest on investments of $3,132.02, and the sale of the "Canadian Trade Index," $189.46, making a total of $11,958.10, and leaving net deficit for the year of $1,562.34.

Increase in Fees.

Commencing early this year, the Association was placed under an obligation to provide for increased expenditures, covering additions to the staff and other general expenses incurred by enlarging the staff. These alterations consisted chiefly of the opening of an Ottawa Office, appointment of a General Secretary, a Manager of the Trade Sections Department, an Assistant in the Transportation Department, extra stenographic help, and an increase of postage, stationery and travelling charges. While we did not feel the full effect of this additional expenditure in last year's business, the increase was sufficient to account for a loss of $1,562.34. Fortunately it was not necessary to dispose of any of the Association's securities last year, so the balance in the investment account remains the same as in the previous year. But early this year your Committee saw that if the usefulness of the Association was not to be seriously curtailed, it would be necessary to secure more revenue through an increase in the membership fees. A schedule of proposed increases, totalling $43,365 per annum, was prepared and submitted to the Membership Committee on February 17th. This Committee considered the schedule, and reported to the Executive Committee that if the need for revenue was apparent, the apportionment of the fees seemed to be fair and reasonable. The Executive Committee gave the matter further consideration on February 27th. As they felt it would be advisable to have the opinion of members from various communities, a special committee of sixteen was appointed, consisting of members drawn from Toronto, Hamilton, Montreal, Winnipeg, Guelph, Peterborough, London, Woodstock and Kingston. This Committee considered the schedule and made alterations which had the effect of making a further increase of $9,455, making a total proposed increase of $52,820. The amount of this increase is subject to reduction, as allowance must be made for loss of revenue due to arrears and resignations. The report of the Special Committee was adopted unanimously and forwarded to the Executive Committee for consideration. It was endorsed by the Executive Committee on March 27th, approved by the Executive Council on the same date, and directed to be forwarded to the Annual Meeting for final decision. Your Committee have gone into the stages in the proceedings to show that the proposal to increase the fees was given the most careful consideration before being submitted to this meeting.

The following shows the new schedule recommended for adoption by Council at the Annual Meeting, and the schedule now in operation:

Firms.	No. of Employees.	Present Fee.	Proposed Fee.	Increase in Revenue.
405.....	Addtl. Rep.	$10.00	$10.00	None.
480.....	Up to 9	10.00	15.00	$2,400
950.....	10 to 29	15.00	25.00	9,500
683.....	30 to 59	20.00	35.00	10,245
348.....	60 to 99	35.00	50.00	5,220
240.....	100 to 149	50.00	75.00	6,000
179.....	150 to 299	75.00	120.00	8,055
77.....	300 to 499	100.00	150.00	3,850
45.....	500 to 999	150.00	200.00	2,250
11.....	1,000 to 1,999	200.00	300.00	1,100
21.....	Over 2,000	200.00	400.00	4,200
				$52,820

Yearly revenue from membership fees under proposed increased schedule	$137,414
Yearly revenue from membership fees at present	84,594
Proposed increase	$52,820

In dealing with the proposed increases, we may consider the fees charged by associations of manufacturers similar to our own. The British Federation of Industries, which includes practically all the important manufacturing industries in the United Kingdom, exacts a single uniform fee from its members of £100 per annum. The National Association of Manufacturers of the United States, a body which corresponds largely to our own, charges a single uniform fee of $50.00 per annum, and the same fee is charged by the Illinois Association of Manufacturers, which includes the City of Chicago. Moreover, the American associations make extra charges for special services. According to the present schedule, the average fee paid per member of the Canadian Manufacturers Association is $23.00 per annum. Under the proposed schedule, the average annual fee per member would be $39.00. Your Committee believe that, while our average fee is low in comparison with these other associations, we could not afford to follow their example and adopt a single uniform fee, owing to the almost inevitable loss of membership which such a decision on your part would create. Twenty-six per cent. of our members employ fewer than 10 people, and pay only $10.00 per annum in fees; 28 per cent. employ fewer than 30 people, paying only $15.00 per annum; and 20 per cent. employ fewer than 60 people, paying $20.00 per annum. Consequently, as 74 per cent. of our total membership pay not more than $20.00 in annual fees, and as many of them would probably resign if asked to pay a uniform fee, which would vary from twice to four times their present fee, we have no option but to retain our principle of grading fees according to the number of employees engaged.

The Association is now beginning a period of intensive organization. During the past seventeen years a framework has been created from coast to coast, with branches covering all the Provinces; now this framework needs a certain amount

of enlargement and consolidation in order to achieve its maximum effectiveness.

Your Committee feel that the Association is being constantly hampered by lack of revenue, and that the services rendered by the various departments and branches could be greatly increased by the judicious expenditure of additional funds. It is believed that there is a fairly general feeling throughout the membership, that our fees have never been commensurate with the importance of the Association or with the value of the service rendered.

Industrial Canada

It is a pleasure to report another successful year for INDUSTRIAL CANADA, the financial statement showing a net revenue of $8,636.62. This is particularly gratifying from the fact that at the beginning of the Association year, the heavy increase in the cost of printing more than wiped out the prospective profits for this year. A readjustment of the advertising rates and an increased volume of advertising, has resulted in the present showing, being an increase of $1,798.11 over last year's surplus.

At the same time, a number of new editorial features have been instituted, which have improved the service and interest in the publication. These include the Department of "News and Views of the Association," and regular monthly reports from the Branches. The chief function of INDUSTRIAL CANADA is to keep the members in close touch with the activities of the Branches as well as the Head Office of the Association.

A small committee, consisting of Messrs. J. F. Stewart, chairman; J. S. McKinnon, J. F. Ellis, J. Allan Ross and J. F. McKay, was nominated by the Executive to advise with the editor and advertising manager on INDUSTRIAL CANADA matters. The meetings of this committee, which were also attended by the members of the Head Office staff, have been productive of valuable suggestions as to articles and matters of policy, and have been of great service to INDUSTRIAL CANADA throughout the year.

We have reason to be proud of INDUSTRIAL CANADA, not only on account of its growing editorial interest and fine typographical appearance, but also on account of the splendid volume of advertising of goods made in Canada, which it carries, and this occasion is seized to suggest to each member that he can do a good service to himself, his fellow manufacturers, and Canadian industry generally, if after reading each number carefully he will pass it on to his purchasing agent with instructions to consult its advertising pages, and wherever available to buy "Made-in-Canada" goods.

Canadian Trade Index

Your Committee decided to publish the CANADIAN TRADE INDEX this summer, in an edition of at least 8,500 copies, for distribution among the purchasing departments in Canada and abroad. Arrangements have been made with the Dominion Government to take at least 1,000 copies for foreign distribution. Copies sent abroad will contain sections printed in French, Spanish and possibly Italian. The suggestion has been made to your Committee that the value of the CANADIAN TRADE INDEX is so highly appreciated, that it would be advisable on the part of the Association to arrange that it should be published annually. While the financial difficulties at present are such that your Committee do not care to recommend annual publication, the suggestion is worthy of future consideration.

Proposed Formation of Divisions

A proposal will be submitted to you at the last business session to sanction the grouping of the Association for administrative purposes into five Divisions, namely: The Maritime Division, consisting of the Maritime Provinces; the Quebec Divison, consisting of the Province of Quebec; the Ontario Division, consisting of the Province of Ontario; the Prairie Division, consisting of the Provinces of Manitoba, Saskatchewan and Alberta; and the Pacific Division, consisting of the Province of British Columbia. The formation of branches within the territory covered by such divisions should be encouraged. There is no doubt that the formation of branches in all the chief industrial cities will do much, not only to increase the membership of the Association, but also to stimulate thought on industrial matters.

Proposed Conference with Western Grain Growers

Your Committee accepted an invitation from the Canadian Council of Agriculture to hold a joint conference of farmers and manufacturers in Winnipeg during October or November, 1919. Tentative arrangements were made, but these were cancelled on receipt of a telegram from the Canadian Council of Agriculture suggesting abandonment of the proposed conference in Winnipeg, pending the visit of Western Agricultural representatives to Eastern Canada.

Resignation of Mr. G. M. Murray

At its meeting on November 26th, 1918, your Committee received with great regret the resignation of Mr. G. M. Murray, who has been in the employ of the Association since 1904. Mr. Murray stated that, while sorry to leave the Association, he had an excellent opportunity to engage in private business, and wished to take advantage of it. The resignation was accepted, but Mr. Murray was induced to remain with the Association until the close of the parliamentary session at Ottawa, where he was placed in charge of the new office of the Association. Mr. J. E. Walsh was appointed successor to Mr. Murray, but your Committee decided to change the title of the Chief Executive Adviser to "General Manager." The General Manager will continue to exercise special supervision over the Transportation Department.

Labor Problems

Your Committee has given much attention during the year to the problems connected with industrial relations. The principles of the Labor War Policy, formulated by the Minister of Labor, were favorably considered and approval was recommended in so far as these principles were applicable to industrial conditions. When the Labor Board of Appeal was created, two representatives of the manufacturers were appointed, and continued to act until the Board was abolished by the Government when the special conditions arising out of the war were altered, and it was considered that the work of the Board had been completed.

In February last the various Branches were asked to encourage the formation of joint standing committees of employers and employees in the manufacturing towns and cities throughout Canada. Action was taken in many localities, and there is no doubt that many difficulties were solved and many grievances settled by common discussion.

When the Royal Commission on Industrial Relations was appointed, Council decided that the Association would make no official statement on a subject possessing so many ramifications, but the suggestion was made to local members in territory adjacent to the points where sittings were to be held, that they should appear before the Commission and express their personal views. These suggestions were carried out with the result that manufacturers have appeared at all the sittings and have given evidence that, in addition to recording

valuable information, demonstrates the great amount of thought and energy devoted to this subject by employers throughout Canada.

Nominations and Resolutions

Your Committee made special efforts to ensure that the Committee on Nominations and Resolutions, of which all your Committee are ex-officio members, should give particular attention to the necessity for ensuring that nominations for officers and members of committees should not only provide territorial representation, but should also secure manufacturers who are in a position to give time and thought to the duties of their respective offices. To this end three notices were sent out to the members of the Nominations and Resolutions Committee in addition to the general notice to all members.

The Lyons Fair

Mr. W. P. Hughes, Secretary of the Montreal Branch, represented the Association at the Fair held at Lyons, France, and also gave assistance to members who exhibited their products. The following were among the exhibitors: Great Britain, the United States, Australia, France, and the Canadian Section, consisting of exhibits of the Canadian Government, products of fifty-five Canadian manufacturing firms, the Canadian Pacific Railway, and the Canadian Government Railways. Of the Canadian industrial exhibits, 38 were from Ontario firms, 14 from Quebec, 2 from Nova Scotia, and 1 from New Brunswick.

It is generally admitted that the Canadian exhibit did much to advertise Canada and Canadian products in Europe, while Canadians who attended the Fair obtained information which will be valuable in conducting export trade.



T. P. HOWARD
Phoenix Bridge & Iron Works, Limited, Montreal
President, 1919-1920, Canadian Manufacturers Association

Tariff Agitation

The lower tariff and free trade movement received special consideration. Your Committee discussed the question at regular and special meetings, submitted proposals to Council and took any action which was considered necessary to assist in maintaining fiscal stability in Canada.

European Exhibition Train

The advisability of supporting a proposal to send an exhibition train containing exhibits of Canadian products to Europe, was considered at several consecutive meetinngs. Objections raised were the import restrictions now imposed by European countries, and the varying gauges of railways. It was decided, however, that the plan had so much to recommend it as an advertisement for Canada, that it should be referred to the Annual Meeting, when the personal advice of Mr. Lloyd Harris, Chairman of the Canadian Mission in London, would be available.

Trade Commission—China and Japan

A proposal to support the despatch to China and Japan of a Trade Commission, consisting of one representative from each of the Boards of Trade of Montreal, Toronto, Hamilton, Winnipeg and Vancouver and one representative from the Association, was referred to the Boards of Trade mentioned for their consideration, but action is deferred pending receipt of the Boards' decisions.

Questionaire to Members

A questionaire asking for various items of information was prepared and circulated among members because it was considered important that such information should be readily available in the Head Office without the necessity of individual correspondence. The response has been gratifying, many suggestions have been received in regard to the services of the Association and much valuable data will be compiled.

Counsel for Branches

Suggestions from various branches that legal counsel should be retained were considered, but it was decided that proposals to engage counsel should always be submitted to your Committee. It is pointed out that the Legal Department of the Association should be able to furnish adequate legal service to members, particularly as special counsel is always retained to represent the Association in court cases, Parliamentary Enquiries or Commissioners' Sessions.

New Committees

The appointment of three new standing committees, namely: "Industrial Relations," "Publishing," and "Commercial Intelligence," is recommended, and the necessary notices of motion to amend the by-laws have been made accordingly.

Heretofore your Committee have dealt with a great number of subjects, which might properly be considered by the committees named, with the result that our sessions have been unduly prolonged and matters that come more closely within our jurisdiction have not received as much attention as they deserve.

It is proposed that the "Industrial Relations" Committee will make a study of industrial conditions; that the "Publishing" Committee will supervise such publications, articles or statements as are or may be issued by authority of the Association; and that the Commercial Intelligence Committee will supervise the activities of the Commercial Intelligence Department.

Proposals Endorsed

During the year, on the recommendation of your Committee, the Executive Council endorsed, among others, the following proposals:

The removal of war-time restrictions from business.

The establishment of a Central Bureau for scientific research.

The provision of facilities to encourage technical education and industrial training.

The attempt of the Dominion Government to encourage the building of small houses.

The work of the Canadian Engineering Standards Association.

The establishment of Government employment offices.

The continuation of Daylight Saving Legislation.

The proposal of the Canadian Association of Stationary Engineers to secure a higher standard of technical efficiency for stationary engineers.

At the November meeting of the Council, it was moved that a special general meeting be called to consider the advisability of moving the Head Office of the Association to Ottawa. An amendment, which directed that an office be opened in Ottawa immediately, and that the question of transferring the Head Office from Toronto to Ottawa be referred to the next annual general meeting, was carried.

All of which is respectfully submitted.

W. J. BULMAN, *President.*

J. T. STIRRETT, *General Secretary.*

J. E. WALSH, *General Manager.*

Discussion of Report

The motion to adopt the report of the Executive Committee, which was presented and read by the General Manager, was made by Mr. S. R. Parsons, of Toronto, who said:

"In moving the adoption of the report I would like to draw attention to one or two items contained therein. First of all as to the opening of the Ottawa office. I am quite sure that the members of the Association will agree with me that already this move has been thoroughly justified, and in saying that I might also add the hope that we will be able to continue the services of Mr. Murray in that connection. I do not know how far the Committee that has that matter in hand has proceeded, but I am sure that I express the views of all the members of the Association when I say that Mr. Murray in Ottawa can do the Association an enormous amount of good in very many directions.

The Increased Fees

"The next question is as to the proposed increase in membership fees. You will notice, gentlemen, that first of all this proposition passed the Legislative Committee; the next stage was that it passed the Executive Committee; then a committee of 16 drawn from different parts of the country, and later it passed unanimously the Executive Council. I think you will feel, therefore, that this question, which is always very important to us, has received already the consideration which it well deserves before bringing it to your attention. I am quite sure, therefore, that the reasons set forth for the increase in membership fees will appeal to all, and without further discussion that you will be able to accept the findings of these different committees and bodies.

"Now, in the third place, there is a proposal for the formation of divisions. I understand, Mr. President, that that will come up at a later stage of the meeting, so that the adoption of this report does not necessarily mean the adoption of that particular item."

MR. J. S. MCKINNON (Toronto): "I have very great pleasure in seconding the motion which has been so ably presented by Mr. Parsons. The ramifications of the Executive Committee cover a very great deal of work, and you see it has given most close attention to every detail that has come before it. You can hardly realize, gentlemen, the work that comes before the Executive Committee unless you could see one of the agendas that the General Manager presents at those meetings, but I think the work has been most carefully attended to and I trust will meet with your approval."

Open for Debate

THE PRESIDENT: "You have heard the motion to adopt the report and it is now open for debate. We have two or three items in it—the French Exhibition train, the transfer of the Head Office, and the increase of fees that will all have to become subjects of debate. The matter now is in your hands."

MR. DOUGLAS (Hamilton): "I would like to ask a question, and that is, if the adoption of this report means the final adoption of the scale of fees presented therein? I am not raising the question from the standpoint of any objection because I fully approve of it. I wanted to make myself clear on that point. Mr. Murray has suggested to me this must be done by an amendment to the by-law. That was my impression, but I wanted to make myself clear on it."

THE PRESIDENT: "It is coming up at the last meeting under the head of amendments to the by-laws, but this would be the approval of the scale of fees by this meeting."

The question being called for, the President put the motion to adopt the report which, on a vote having been taken, was carried and the report declared adopted.

The Ottawa Office

At this juncture in the proceedings, Mr. S. R. Parsons, of Toronto, rose to speak on a question of privilege. Following his remarks and the discussion thereon, the President referred again to the report of the Executive Committee.

"You all realize," said he, "that in the carrying of this report it commits you to the increased fees, or do you want to debate that further under the amendment to the by-laws?"

MR. HENDERSON (Windsor): "Under the amendment to the by-laws. What about this change of the head office to Ottawa? Will there be a further opportunity to discuss that?"

THE PRESIDENT: "That should be settled by this report, Mr. Henderson; I think that it is adopted by the report. As you all know, the establishment of the Ottawa office was a compromise. It is up to the annual meeting to say whether that compromise meets with their approval. That, I take it, would settle the question."

MR. W. C. COULTER (Toronto): "I should think, unless somebody is prepared to give notice of motion to bring it up, it could not be dealt with at this meeting at all. Unless there is some sentiment in favor of it, it should not be discussed at all."

THE PRESIDENT: "Couldn't we settle it now? If you wish to move in amendment that the head office be left in Toronto, we could settle it now."

MR. T. P. HOWARD: "I would like to move in amendment, to get this thing settled, that, in view of the fact that we have opened an office in Ottawa which meets our requirements, the head office of the Association remain in Toronto."

MR. SHAPLEY (Toronto): "I have much pleasure in seconding that motion."

The question was called for and the President having put the amendment, it was carried unanimously.

Question of Privilege Raised at Convention

Mr. Parsons Made Complaint of an Article Criticizing the Management of the Association and Himself—Reply by Col. J. B. Maclean—Mr. Henderson's Pointed Rejoinder—Vote of Confidence in the Executive and Officers Carried Unanimously

A VERBATIM REPORT

FOLLOWING the adoption of the report of the Executive Committee, Mr. S. R. Parsons asked to be permitted to speak on a question of privilege and, consent having been granted, he spoke as follows:

"Mr. President and gentlemen, I shall take the liberty of referring to an article in *The Financial Post* of last Saturday, June 7th. This article is in the shape of an editorial and is headed, 'Farmers' Advances Ignored by C.M.A.' First of all there is published a copy of a letter from Mr. W. C. Good, in which Mr. Good states, 'Last fall, I believe, through Mr. Parsons, I was invited by the Toronto Branch of the C.M.A. to meet with them and speak to them of the farmers' viewpoint. I consented gladly, and twice a date was fixed, but both times the C.M.A. Secretary wrote, postponing the date, and it looks now as if they are deliberately unwilling that the conference should take place.'

"In referring to that particular matter, let me say, gentlemen, that I happened to be sitting on the same platform with Mr. Good and I suggested to him then—this was a number of months ago—that he come to us at a convenient time for himself and the Association and make known to us his views; that we were always glad to hear from a representative agriculturist in the province. You can quite well understand it is difficult to arrange a meeting on short notice, and, if I mistake not, once we asked Mr. Good to come at a certain time and he was unable to come at that particular time. Is that not correct, Mr. Macdonald?"

MR. MACDONALD: "Yes, that is quite correct."

MR. PARSONS (continuing): "And twice he was asked to come but something interfered with it. Now, we have kept the invitation in mind all along and, instead of inviting him to a meeting of the Toronto branch, we decided a little time ago—long before this article was written of course—to invite him to the meeting of the Association, and Mr. Good speaks to us at the banquet of the Association. That is giving him the most important place he could have in connection with any of our gatherings." (Applause).

Invitation to Mr. Good

"It is possible that Col. Maclean and the *Financial Post* will take the credit of having him asked to our annual banquet. We don't care who gets the credit for it, only we know it came simply through the Association and through no other channel.

"I would like also to read a few words in which the *Financial Post* speaks of Mr. Good as 'a graduate of Toronto University; a very successful farmer, and one of the leaders in the National and Provincial Farm Movement. The *Financial Post* has repeatedly said that the big farmers were, like the big business men, very fair. That they were not unfriendly to Canadian manufacturing or a protective tariff. That the real trouble was that the C.M.A. affairs were in the hands of a few narrow-minded men who had been mismanaging its affairs and misrepresenting its membership, estranging the farmers, the labor unions, the clergy, the returned soldiers; and finally, and quite unnecessarily, within the past month the retail merchants who, more than any others, can make or break the Made in Canada movement.' That is quite a formidable list, gentlemen."

MR. MEADOWS (Toronto): "Nobody pays attention to it."

MR. PARSONS: "We will pay attention to this to-day, for I hope we will have it out to-day. (Quoting) 'The C.M.A. annual meeting is next week. Mr. Good's letter, events of the past year, and particularly present serious conditions, demand an immediate and more drastic development of the plans inaugurated a year ago, for taking the control and direction of this great organization out of the hands of the Toronto clique and the making of it once more a truly national and popular institution. Attendance at this meeting should be a duty of the proprietors and general managers, the most important work of next week.'

"The Old Gang" Puts on Brakes

"'Under pressure a year ago the affairs of the Association were put in the hands of a General Manager, but almost at once the old gang put the brakes upon him. It was explained to him that he was selected because he was an expert on transportation' (that will be news to a good many of us) 'which was not at all what the members generally intended. He has greatly improved the Head Office attitude to the members and the public, but he has not taken the big leadership that was expected. This has been generously, though we fear very unwisely, assumed by Mr. Parsons, the late President. His utterances on labor, agriculture, the churches, and retail profiteering have given much offence as they are regarded as the official views—which they are decidedly not—they have created an antagonism against the manufacturers when all classes should be working with them to take advantage of the greatest opportunity this country has ever had. We have already let much of it go past us; no more time should be lost over petty things. The public should be given clearly to understand that only the President or General Manager has any authority to express the views of the manufacturers of Canada.' . . . . . 'To-day the Association is in the position of having snubbed the farmers.'

"The editorial goes on: 'Recognize all *bona fide* trade unions. Invite at once their leaders to meetings of the Association, and their co-operation in the building up of Canadian industry. Later provide for them in the C.M.A. membership. All wage and allied problems should be utterly tabooed in the C.M.A.'

"Gentlemen, I have been a long time connected with the C.M.A. and I never heard a wage question coming up yet.

"'Labor now believes the C.M.A. is their chief enemy. It should be their partner and best friend. Associate or other membership in the big Association will so broaden the outlook of employer and employee that they will understand each other better in the individual trade associations. Go on record against combines and profiteering, which are the greatest source of irritation in Canada to-day.'

"I think I have read enough, gentlemen, to let you understand why I desire to bring up this question. Let me speak for a moment of my personal relationship with Col.

Maclean. During the early part of my year as President of the Association, Col. Maclean came to me and he said he had been most unfairly treated by Mr. Murray, our General Secretary, and he denounced Mr. Murray in the roundest possible terms on account, he said, of the unfair way in which he had been dealt with. I said to Col. Maclean, 'Col. Maclean, I would be glad if I could bring Mr. Murray and yourself together.' I always feel, gentlemen, that when two men sit down at the table and face each other that their difficulties mostly vanish and all that miserable little hard feeling which may be in the mind of either one or both of them vanishes when they come to understand each other, and I spoke to Mr. Murray about this and he said he would be glad to meet Col. Maclean. He said, 'I feel sure that Col. Maclean misunderstands me altogether.' I don't know that Col. Maclean gave his consent to such a meeting; I wouldn't be sure of that at the present time. It is some time ago and my recollection is not quite clear, but I hope that, when I get through speaking, Mr. President, you will allow Col. Maclean the opportunity of speaking, and then I wish the Association to say positively and definitely whether they consider I have taken what action I have and stated what views I have in the interests of the Association. It is only fair to the Association, it is only fair to me, and it is only fair to Col. Maclean to give him every opportunity to say right on the floor of this house what he has to say.

Offered to Withdraw Suit

"Then later Col. Maclean came to me in my office one day—this was just before our annual meeting of a year ago—and he said, 'Mr. Parsons I have come to say to you that, if the Association will apologize, then I will withdraw my suit against the Association and against Mr. Murray, but if they don't apologize,' Col. Maclean said, 'I will take my own ways of dealing with the situation that has arisen.'"

COL. MACLEAN: "Pardon me, I am sorry to interrupt you, that is not true."

MR. PARSONS: "That is the truth. I absolutely declare it is the truth and the whole truth. If Col. Maclean will wait till I get through, he can say anything he pleases. I said to Col. Maclean, 'It is a free country, Col. Maclean, and I suppose that you can do whatever you think best.' Then he went on to denounce Mr. Murray again, and I said, 'Col. Maclean, I will not listen to that while Mr. Murray is not here. If Mr. Murray were here and I could bring you two together and have the two sides out, well and good, but I am not going in this office to hear your side of the case and to have Mr. Murray's side unsaid and no more.' Then Col. Maclean said to me, 'Well ———'; then he went on to argue his case, and I said, 'Now, really, Col. Maclean, I don't know anything about it. Three or four years ago I remember something came up, but I was busy at that time in the Transportation Department and I have forgotten what it was, and if you asked me to-day just what this trouble is which resulted in a lawsuit on your part against the Association I would be compelled to say that I couldn't tell you.' Col. Maclean said, 'Well, now, I have it all here in reprints from the articles in INDUSTRIAL CANADA, and the *Financial Post*.' I think it was the *Financial Post;* however, he had a sheet there and he said, 'It is all contained on this sheet; will you read this?' I said, 'Yes; I am going to Hamilton this afternoon and I will read it on the way up.' He said, 'Will you let me know what you think of it,' I said, 'I certainly will.' And when I got home in the morning I wrote a note to Col. Maclean saying that, having looked over the articles in question, they came to me as for the first time, for I had forgotten what they were all about, and I said, 'Reading them in that way I came to this conclusion that there were things said on both sides that had better be left unsaid; they were said in the heat of a controversy and there was as much said on one side that should not have been said as on the other side.' So I said, 'Col. Maclean, my advice to you is to forget all about it and, if you have any interest in the Association and its work, come along at our annual meeting and let bygones be bygones.'

Occurrences at Montreal

"Now what occurred at the annual meeting? You will remember Col. Maclean had been advocating that the Association institute a new and vigorous policy, with a manager at a salary of $50,000 per year. He also advocated some other changes. I spoke of these from the chair and afterwards you will remember that the matter was simply passed over. I will say this, that at the close of the meeting Col. Maclean came up and offered me his hand. He said, 'I have nothing to complain of at all in what you have said.'

"Then that evening or the next evening—now this is a thing I have been told. What I have been telling you before is from my own personal knowledge—but I was told that same evening or the next evening that several members of our Association were in one of the small rooms of the hotel in Montreal and Col. Maclean was there. These members of the Association who were there said something to Col. Maclean about burying the hatchet and forgetting about the past, and Mr. Murray came along, and I have been told that the friends who were there asked Mr. Murray and Col. Maclean to shake hands. I have been told they did shake hands and that it was said by Col. Maclean before he left the room, that he would speak the next morning to the Association and say that, having had a chat with Mr. Murray and others and understanding more clearly the past of which he complained, that he was now quite satisfied and therefore he would say nothing more about the things which he had been complaining of.

"Now, that is hearsay on my part, but I believe it of course to be true. That can be substantiated. The next morning, however, Col. Maclean had evidently changed his mind and the chip was put on the shoulder again and has remained there ever since.

"In the fourth place, I wish to speak of the Annual Industrial number of the *Financial Post*. I was asked to write an article for that special number, and in view of what Col. Maclean has said in the *Financial Post* about my antagonism to the farmers you will be surprised that the editor asked me to write on this question: 'The relations between the Farmers of the West and the Manufacturers of the East, and also the possibility of bringing them together in conference,' a policy which I had advocated you remember at the annual meeting.

A Display of Bad Taste

"This paper is dated November 2nd, 1918, and in that article which I wrote as carefully as possible, spent some time upon it, I said, 'The Grain Growers accepted the manufacturers' proposal for a conference, the date was left to be decided later on. This then brings us down to the present moment,' and I said everything I possibly could there about the good relationship that should be sustained between these two classes. What was my surprise, however, on getting a copy of that paper, when it was issued, to find that outside of the article that I had written, the President of the Association had been asked to write an article, which he did; Col. Thomas Cantley, of Nova Scotia, had also been asked to write an article, which he did. That was not the surprising part of it; the surprising part of it was this, that in the very same number, after three men connected with the Association and being more or less prominent in the

work of the Association, had taken the trouble to write special articles at the request of the editor—in the very same issue of the paper, the Manufacturers Association was denounced.

"Did you ever come across anything in your life, gentlemen, which was in such bad taste as that? I don't think I was ever so much annoyed in all my life as I was when I read these editorial utterances. He was speaking of a certain party here who had a special experience; I don't know whether it was a case that was real or just a supposititious case. He said 'This man's case is typical of fully 90 per cent. of the manufacturers of Canada to-day. They have no selfish objects to serve. They have no personal ambitions to gain. They are fighting the battle of business with the same sense of duty as our splendid men who are fighting for our freedom at the front are doing to-day. They are content with fair profits. Their reward is in work well done. Yet this most valuable, public-spirited group in all Canada is so unpopular, disliked, mistrusted right across the continent that the condition is handicapping the development of Canadian industry.'

Causes of Unpopularity

"'It is only necessary to note the outcry voiced in the press of the country against the Association that has just been organized by a few public-spirited men to aid in developing Canadian natural resources. Nobody ever deserved a more hearty national welcome. But it is regarded as an adjunct to the Manufacturers Association.' (I suppose he refers to the Canadian reconstruction association.) 'That is sufficient to condemn it without further enquiry.

"'Investigation shows two clauses. The selfish, grasping after monopoly and exorbitant profits by perhaps five per cent. of the manufacturers; and the stupid, pin-headed management that has characterized the Canadian Manufacturers Association for a number of years, estranging friends and antagonizing political and other important groups.

"'The outlook ahead is too serious, and the importance of manufacturing as a factor in aiding us to meet the taxation mounting up to appalling figures is too great to permit the present state of affairs to continue, and it will continue and grow worse until the C.M.A. is put upon a broad basis.'

"Just one more reference: 'Sir John was not long home when the great Methodist Church, inspired by Western delegates, passed a resolution claiming that the only method of overcoming the troubles created by the few combines of the manufacturers and the graft of the public utility agents was public ownership, when we would all work for the same wages and there would be no profits.'

"I just leave that matter with you. These are days when we should be rather restrained in our language, and it is hard to be restrained when three manufacturers are asked to write for that particular number and the Association is assailed in the way in which it is there.

A Question of Advertising

"There is another matter to which I would like to refer. On April 16th of this year I got a letter, a long letter, and a splendidly written letter from *Maclean's Magazine*, published by the Maclean Publishing Company, asking that the C.M.A. use the columns of *Maclean's Magazine* for publishing their propaganda. I shall not read the letter, it is too long. As I say, it is an excellent letter, one of the best written letters that I ever received. My reply to it was as follows:

"Yours of the 10th instant to hand making suggestions as to the C.M.A.'s message reaching the public through *Maclean's*. Business courtesy demands a reply to your forceful letter. I would, therefore, like to point out that, although I have no personal animosities whatever, yet as the Maclean Publishing Company, through one of its organs, constantly seeks to belittle the C.M.A. by stating that its management "has for years been in the hands of a picayune, pin-headed, self-satisfied, Toronto clique" (of whom no doubt I am considered one), "I do not see how they can expect any hearty goodwill or enthusiastic support from the men and organization they thus assail."

"Gentlemen, beyond writing that letter I did nothing. I was not present at the meeting of the Committee when the advertising was arranged for. I had nothing to do with it and have never had anything to do with it. So that whatever I said there was simply my own private view and it was not used by others; my view was not expressed to the Committee, and I knew nothing of their advertising arrangements whatever.

"Now, then, in connection with the annual meeting of the Toronto Branch, our friend, Col. Maclean was there and upon being asked to speak, among other things he dwelt upon his favorite theme and denounced the combines connected with the members of the Association. After Col. Maclean was through, I said I did not think it fair for him to denounce combines in a general way because it reflected on every member of the Association—a most unfair thing; that if Col. Maclean had any knowledge of any combines working in restraint of trade he ought to mention such, and I think you will say, gentlemen, that that was a very fair attitude to take on the question. (Hear, hear.) Col. Maclean got up and he said he knew of a number, but he would only mention one, and that was the Paper Makers' Association. Now, gentlemen, I am not here to speak for the Paper Maker's Association. They have an Association of their own. I understand that it has been under Government investigation for a year or two past. I take it for granted that if they had been operating in restraint of trade that they would have been dealt with according to the laws and regulations governing the Act which they would come under.

Assumption of Leadership

"Now, just a moment or two about the criticism in the editorial which I have read, and I am through. I am sorry to keep you so long, but I feel to-day this matter ought to come up. First of all, as to assumption of leadership by myself. Now, gentlemen, I have been connected with the Association quite a number of years. I have never sought office at the hands of the Association; I have always voted for some one else, never for myself. When the Association has asked me to do certain work I have tried to do it to the very best of my ability. I have never assumed leadership lately or formerly. I have never given a sentence of direction to Mr. Walsh, and he wouldn't take it if I were foolish enough to give it to him, or to anyone else. Whenever I have spoken, I have spoken at a meeting of the Executive Committee, and I have had my say just as others have had. I don't think I have influenced the policy or work of the Association any more than anyone else. I know that I have not, but naturally I have had my say, but never have I assumed leadership.

"Then in regard to labor, it is made to appear that I have antagonized labor. That is a thing, gentlemen, I can't understand. I think I was one of the first members of the Association to advocate a relationship with labor akin to brotherhood. You will remember that at the annual meeting in Montreal one considerable section of my address dealt with the relations between employers and employees, and those utterances of mine were of such a broad character that I don't mind mentioning here, and I think it is only fair to say, that Senator Robertson wrote to the Association and asked them to pass on to me his personal thanks for the way in which I had dealt with that particular question.

(Applause.) Furthermore, I received letters from all classes of people east and west, some of them labor men, and I received expressions of approval from labor men that I met everywhere. One labor leader in Hamilton, the President of the Trades and Labor Council, I understood, wrote me and asked me if I would send him a dozen copies for distribution, so highly did he think of it.

Attitude Towards Labor

"Now, gentlemen, I have never yet upon any platform discussed any other relations than are set forth in my annual address of last year. If those utterances were acceptable to the members of this Association and to other classes, then any utterances I have made on the question of labor must equally have been satisfactory. (Applause.) I know, however, that they were not satisfactory to certain extremists; I never expected they would be. You and I cannot expect them with all the fairness of mind we can command—we cannot expect always to carry all the labor men on our utterances, though we desire to be as fair as we possibly can. My personal relationships I may mention with labor to-day are of the most intimate and satisfactory kind.

"Now, my utterances on certain other matters,—I might say that when I appeared before the Royal Industrial Commission lately, I did not appear simply at my own suggestion. I received a notice from the Association that I was one of those appointed to speak. I was not present when certain members were asked to appear before that Commission, but I was selected as one and therefore my utterances before that Commission were made and I expressed myself before the Commission as making them personally and not as representing the Association, although the Association asked me to go.

"Now, in connection with the question of agriculture, This is an extremely important matter. All sorts of things have been said as to the attitude of the Association towards the farmers. Gentlemen, I know the attitude of this Association has been that of trying to reach the farmers and to talk to them and to desire to understand their many problems and to try and get them to see our problems and then from a common platform, if that possibly could be reached, to suggest what we would do in the way of getting together. This matter is so important, however, and is dealt with in the report of the Executive Committee, that I desire to read just what has occurred, so that there may be no misunderstanding:

Relations with Farmers

"'It will be remembered that at our last annual meeting I proposed, on behalf of the Association, a conference with the Grain Growers in order that we might try and see each other's problems and if possible arrive at a better understanding covering our mutual relationships and interests. Mr. Mackenzie, the secretary of the Council of Agriculture, was present and accepted the proposition which was most enthusiastically carried by the Convention, and negotiations were almost immediately opened up by us and both interests were committed to the project. Subsequently the matter was carried through one channel and another of official circles but finally with no definite result, to our very great disappointment. I am quite sure that the leaders of the Grain Growers will not charge the Canadian Manufacturers with blame on account of the fact that the conference never eventuated.'

"That, I think, is sufficient to say, and I hope the press will have it. I have another copy here so that there cannot be any mistake about our utterances.

"Now, just a moment. I am criticized also because of my attitude towards the churches. Well, gentlemen, let me say this one word, there is an organization in Toronto called 'The men of Methodism.' I was telephoned to by a member of the Executive Committee, himself a minister, and asked if I would not speak on the programme of the General Conference of the Methodist Church. He said, we have already heard the one side from a conference officer. We believe there is another side. We would like to have a business man discuss it, and we are anxious for you to come and the Executive Committee desires that you will be present and give us your views. I accepted that invitation, and I supposed that night I was speaking to a private company of Methodists in my own church. I spoke, gentlemen, only for Methodists and to Methodists and as a Methodist; my remarks had no relationship whatever to other churches. I will say this, however, that my views have been endorsed by manufacturers who have written me from all over the Dominion; from many in Toronto; nearly all my friends have come to me and have gone out of their way to speak favorably of my utterances and to say that they appreciated someone speaking up and declaring against a proposition of the Methodist General Conference which is all focused in these words: 'To demand a transferrance of our entire economic system from a basis of competition and profits to one of co-operation and service.' That was what I objected to and I think every business man in the whole country would object to the same thing. (Applause.) I don't think it is practicable. As a national matter how could we carry it out? We all know, we are not simple enough to misunderstand the situation, unless this country, from the forest and factory and mine and fisheries, and in other ways, produced all it possibly could and sold these products at a profit, we would be bankrupt; nothing else for it at all; the only thing would be a repudiation of our national obligations. As with the nation, so with the individual. As business men, we see the impossibility of carrying out any such programme. What I argued is this, that in every well-conducted business, there is competition, there are profits, there is service. These two groups cannot be antagonistic to each other, and the men who brought forward such a programme don't know what they are talking about, in my opinion. (Applause.)

Retail Profiteering

"Now, just one other item in regard to retail profiteering. I haven't any idea, gentlemen, why I am charged with views which are antagonistic on that particular question, except this—I remember seeing the statement made by the Minister of Labor in the Senate a few weeks ago in which he spoke of the enormous spread between the manufacturer's price and the retailer's selling price. He quoted this statement, that the manufacturers had sold boots or shoes at $6 a pair and they had been retailed at $12 a pair, and either he quoted or someone else did, the enormous spread, much greater in proportion than on that particular item in the cost of dresses. Now it appeared to me, as I am sure it will appear and be viewed by each one of us, that if there is that spread, and it is too great between the manufacturer's costs and the retailer's costs, that there is an avenue of investigation there which should be cleared up.

"But at the same time, gentlemen, I want to be entirely fair to the retail merchants, and what did I do? Last week I received a letter from a member of the Parliamentary Committee on the High Cost of Living asking me if I couldn't give him certain suggestions which perhaps might be helpful. Now then, in connection with retail prices, what did I say? I said this: 'I believe, however, that what you say is entirely correct in reference to the manufacturers getting blamed for the higher costs when in many cases they are not blameworthy; the spread between the manufacturer's selling price and the retail price is too great altogether. I do not know just how much justification there might be

for this; for instance, the retail man who before the war might, with the lower cost then prevailing, have covered his expenses and margin of profit by an advance of say 25 per cent. on the average, may perhaps now with the higher rentals, higher taxes, higher freight rates, higher wages of help, higher cost of coal, and other supplies as well as higher general expenses, have to obtain a margin of double what he used to receive to come out as well.'

"Is there anything unfair about that attitude, gentlemen? Merely a suggestion that the matter be studied.

"Now I think I have occupied your time long enough. I am sorry to have taken up so much time in the discussion of this matter. It appeared to me that it was important enough to deal with it, and, Mr. President, I hope that you will ask Col. Maclean to say anything he has to say, and then it will remain for the Association to say whether they think I am blameworthy in the various ways in which I am charged or whether I have fairly tried to do my duty from time to time towards the Association as best I could. I don't want you to consider me personally at all. If you feel that I have not acted wisely, say so. I can stand the truth at any time, but if you feel that I have done my duty in the interests of Canadian manufacturers and others whom I may represent from time to time, then it remains for you to express yourselves in any way that you may see fit." (Applause.)

THE PRESIDENT: "Now, Col. Maclean, this makes me feel very much at home. Winnipeg has very much this attitude just now. Colonel, will you speak now?"

Col. Maclean's Reply

COL. J. B. MACLEAN: "Mr. President, I am sorry the ex-President didn't let himself out more and say really just what he thought. It was my good fortune—I have always felt it through life—that a great many years ago, when I was a young sub-lieutenant in the barracks, I was under two officers who are spoken of to this day because of their profanity and severity; they gave me hell on parade and immediately we were off parade, they were my best friends. On one occasion an American officer heard me being slanged because my horse had thrown me and one or two other little things that happened, and immediately after parade this particular officer, the late Major Short, was extremely nice to me as I was to him. This American officer said it would never go in their service, and he wondered how I could ever speak to that man again. So that I don't mind how roughly I am handled, as long as it is fair.

"I want to say at the outset that I don't think any man filled the presidential chair of this Association—and I have been connected with it and have been attending their meetings and have been on deputations since the first one was held in 1882, thirty-seven years ago—I was going to say, I don't think any man filled the presidential chair more conscientiously or gave more time to the work of the Association than has Mr. Parsons, and I believe he has always been actuated by the very best of intentions.

"I think he takes a narrow view of the affairs of the Association, of the work of the Association. I am sorry that in his reply to-day, instead of dealing with the petty things, he didn't deal in a broad way and take up the points in a broad way that are being taken up in a broad way by the *Financial Post*. Remember this, the *Financial Post* merely reflects and records and represents the views of the manufacturers as expressed to the editor and representatives by these men. These men are the older members of the Association who have made successes and whose opinions are worth while. I am afraid Mr. Parsons—the only criticism I would have of him is that he takes a very narrow view. Personally, I have a very great opinion of this Association. I believe, and I am working towards, and will continue to work towards, no matter what criticism may come, making this Association what it ought to be, the greatest and most powerful organization, second only in its power to the Parliament of Canada, for the upbuilding of this country.

The Made-in-Canada Campaign

"Now, as to Mr. Parsons' personal criticism of me, I am almost sorry he took that up, but on the other hand, I am glad, because it gives me the opportunity of saying something on that point. First of all, I did not go to Mr. Parsons with a request that he settle any differences between myself and Mr. Murray. I think this afternoon I will give you the correspondence which originated it. There have been no personal differences between myself and Mr. Murray, but INDUSTRIAL CANADA made a personal attack upon me. One of the *Financial Posts* said on one occasion that the Made-in-Canada movement was one of the best things that had ever been done by the Association, but we pointed out that certain members of the Association (if I recollect right that is the effect of it) were taking advantage of Made-in-Canada and were putting it on their goods—putting it on inferior goods and therefore bringing reputable manufacturers into disrepute, and we said that the Made-in-Canada campaign should be carried on, but it should be carried on over the individual names of the manufacturers who would say that any article with that name on could be guaranteed, could be trusted that it was made in Canada.

"Now, I will tell you why that article appeared. One of our editors came in one day and he said he was in a place, and he gave me the name (well-known—he was a member of the Manufacturers Association—it was in 1914), and while he was there a man was present in his place from New York who was selling him an inferior German product, and he arranged with him to put the words 'Made in Canada' on that product, and it was sent out, and we traced it and we found it for sale in a retail store in Toronto afterwards. Again, a retail store applied to a manufacturer, a member of this Association, to make a certain inferior article and put 'Made in Canada' on it; it was to go in a display of Made-in-Canada goods. This man refused to do so. Later another firm, whether they were members or not, produced that article and it was on the floor of this retail store; we saw it there. That was why that article appeared.

Offensive Letters

"Now then, there were rather, I think, offensive letters written by Mr. Murray in connection with another matter. They certainly were offensive to one of our managing editors, afterwards to myself, as you can see by the correspondence. I don't want Mr. Murray to think I am attacking him in any way now, but I think you know of a number of similar circumstances or somewhat similar circumstances to that. Mr. Murray, as I have said in the articles I have written, was an exceedingly good secretary. I don't think you can get any man who could handle the office of the Association, the details of the office, better than he did. Now, as I said, Mr. Parsons wrote me several times asking me to see him, to see if he couldn't arrange a better understanding between Mr. Murray and myself, but I replied there was no misunderstanding between Mr. Murray and myself and there was nothing to arrange. Finally I went to his office at his request—I think I can show you the letters this afternoon—and showed him the article and correspondence that passed between Mr. Murray and myself. He said he wanted to arrange in some way that this action for libel that I had

brought against the Association should be settled in his time, and the matter was discussed and nothing further done.

"Now, in Montreal my good friend Mr. McKinnon and Mr. Stewart came to me and asked me if I would not settle my difference with Mr. Murray. I told them quite frankly, 'I have no difference with Mr. Murray; I have no quarrel with Mr. Murray, but some people insisted in spreading that.' Is that not correct, Mr. McKinnon?"

MR. MCKINNON: "Partially so, Colonel, just partially; it is about a half truth."

Offers a Thousand Dollars

COL. MACLEAN: "I wish you would correct me. I would like Mr. McKinnon to speak afterwards and correct me. They wanted to know if I would shake hands with Mr. Murray, and I said certainly, and I told Mr. Murray then how highly I thought of him. I paid no more attention to it; I thought no more about it, and this statement that I was to speak the next day was quite a surprise to me. There was nothing said, as I recall, of it.

"I am sorry to take up your time with this reference to Mr. Murray, because I didn't want to refer to it, but I hope this afternoon I will show you the correspondence or show it to the President or to a committee. In fact, I think bringing up this Murray case is merely a bit of word politics.

"I just want to say this in conclusion—any further reference to Mr. Parsons' remarks will, I am sure, be dealt with by the editor of the *Financial Post*. His address dealt largely with that subject and will be replied to through the columns there. I just want to say this—I feel very strongly on the greatness of this Association and the very great importance of building it up and putting it in the hands of a big man. Mr. Walsh may be the man, I hope he is. (Hear, hear.) But if not, let us get a stronger man. Mr. Walsh has proved his capacity; he has done exceedingly good work, we all know, in the Transportation Department, but I will give practical evidence of my faith and my belief in the value of this Association and in the value of a big man at its head who will express its views and who will make it popular and carry the whole country with it. I will be one of fifty to give a thousand dollars a year towards the salary of its general manager. (Voices—No, no.) And I believe that in the long run the money will be well spent; or I will be one of twenty-five to give $2,000 a year.

"Now, gentlemen, I am sorry; I had no intention of speaking. I should have said Mr. Parsons kindly called me up yesterday afternoon and said he was going to speak, and I said I was very glad he was bringing it up, but I had no intention of saying anything whatever, and I thank you for the kind hearing you have given me."

Mr. Henderson's Comments

MR. HENDERSON (Windsor): "I will not take up much time, for this Association is, I consider, far too large an Association to be worried or bothered by any personal differences between the members and any publisher of newspapers. It is unfortunate that any names have been mentioned at all, and I would not say anything but the question is too large, and Col. Maclean has asked that the matter be treated in a broad way. I will try to be broad, but before saying anything about the broad principles, I would like to say Col. Maclean is absolutely under misapprehension as regards the seeming difference between Mr. Murray and himself. When I was your principal officer I happened to notice an article in one of the Maclean publications which, to my mind—well, I don't know anything about newspaper ethics or publishers' ethics, but I do know something about the ethics between business men—and I wish to say it was unpardonable, that is the mildest I could put it. I wrote the editor of INDUSTRIAL CANADA and drew his attention to the article and said some reply should be made. I don't think Mr. Murray, up to this time, possibly had seen the article I mention. I don't think he ever saw the reply. I didn't write it at all, but I saw a copy of it before it was published, and so far as anything libellous is concerned, I don't think my friend Col. Maclean, whom I have had the pleasure of knowing for over a quarter of a century, could have any complaint, but I felt jealous for the honor of the Manufacturers Association, and if he found any manufacturer had committed an unpardonable sin such as he mentioned, instead of going after the Association as a whole body, why in the name of heaven didn't he denounce that man? (Applause.) Why did he attack the whole of the organization? To my mind that is worse than anything that I have heard yet—that the whole Association was to be pilloried and degraded for the terrible offence of one man is, I think, unpardonable.

Article Was Not Helpful

"Now, to come to broad lines, that article which appeared in last week's *Financial Post* certainly did not help to mend the differences between the agricultural interests and the manufacturing interests. If there is a division, will such an article as that bring us together? (Voices—No, sir.) It was stated nothing was done to bring the agricultural community and the manufacturers together. Has Col. Maclean got a very short memory? Does he not know that in 1914 we met the Grain Growers, Mr. President, and during the time we spent together in Winnipeg we did everything possible to get the views of these men and after wrestling with the matter for three long days and nights we agreed upon certain things and we arranged for a representative mixed committee of manufacturers and grain growers to wait upon Mr. Borden and the Cabinet. We did meet them by appointment, and we discussed matters very fully, and I may state Mr. Good was one of the members there at the time and helped to discuss matters. We tried to agree upon something which would be for the benefit of the whole of Canada. We found there were irreconcilable differences between the two bodies; at least the grain growers thought so; I myself didn't think so; I think we tried to understand them as well as we could, and from that day to this no one can say we have not made every possible attempt to get in close touch and harmony with the great agricultural interests of this Dominion. Because I say now, as I have said often in public, that the whole prosperity of this Dominion depends not only on the efforts of the agriculturists, but also of the manufacturers. No country can be great which depends on agriculture alone; no country will ever be great which depends on manufacturing alone; but the two have to go hand in hand, and I say it is an ill-done thing for any man, even if he is the proprietor or publisher of a paper, to spread reports which are going to make wider the difference than it is to-day.

No Such Thing as a Clique

"In regard to the running of this organization, I question if any man here has attended more meetings of the Executive Committee than I have. For four years I don't think I ever missed a meeting of the Executive Council and Committee, and I don't know of any body I have ever been connected with in which there was more freedom of opinion, or

more independence of opinion, than there was in that Executive Committee, and to say that there was any clique is most abominable and is an infamous untruth. (Applause.) I think many of the older members here know me and I certainly would be the last in the world to submit to dictation from anyone. I don't care who he was or what he was, and I have no hesitation in expressing my opinion to say I was not dominated by a clique, and I say it was a personal reflection to say that I personally dominated over that body. It is something that to me is a little unwarrantable.

"With regard to the general policy of the Association, I may have my opinion and Col. Maclean may have his opinion, but we put the matters in the hands of—we elect our own committee or elect our Executive Council and we trust to the fairness of these men, we trust to their kindness, and it is up to us to see the right men are elected and it is not to discuss in the newspapers or any place else if we don't agree with them, but for goodness sake don't allow any expression of personal opinion to interfere with the work of this great organization which, to my mind, at the present time, is the most important organization we have in Canada to carry on the work and to pay our debts." (Applause.)

Vote of Confidence Passed

MR. BITTUES (Montreal): "I would like to move that further discussion such as this can be of no great good in this meeting. This can be done, however; you have heard personalities mentioned; you have heard discussion of a clique and so forth; you now have a representative meeting before you, and, if I get a seconder, I would move a vote of confidence in the Executive Committee, inasmuch as Mr. Parsons, Mr. Walsh, and Mr. Murray are members of that committee, I believe, and that further discussion be referred to a committee appointed for the purpose.

Mr. SAM HARRIS (Toronto): "I don't think that is right. The *Financial Post* has been copied by a great many papers and it is all over Canada, and here is a representative meeting, and if there is anything to say, say it now. I personally have a little to say, because for the last fifteen or sixteen years I have been a member of the Executive Council. I am not here to boast or confess, but, in making this statement, it is only to bring it up to the point. In that fifteen years there has been an election every year and the members of the Association have utilized their franchise. Also, in that fifteen years we have had many meetings in many places and I suppose to get anything down to a point—not a pinhead, but the point—you have to get down to the individual, and in speaking for myself, I don't want to do that particularly for myself, but for colleagues that have been doing what they could in those years. But in that time I have paid my own expenses, every dollar except a lunch now and again in Montreal. (Laughter.) (No use going to Montreal any more.) In that time, wherever it was necessary to go I have gone, and many others of the members, and done what we could to the best of our ability. I want to come down to personalities just a little. Generalities we have had enough of. It can't possibly be Mr. Murray. I always thought it was, but Col. Maclean has said it was not, so it must be somebody else. I want to ask Col. Maclean if he wrote this article in the last issue of the *Financial Post* or inspired it. Did you write it or inspire it?"

COL. MACLEAN: "You had better write the editor of the paper."

MR. HARRIS: "He answereth not. The letter is to Col. Maclean, but the reply is not written by him. It does not say so. It is like some of the other things, under a *nom de plume*. However, we need not ask the Colonel. If he had written the article he would then be conversant with everything in it, and therefore able to answer any questions that are directly mentioned here. It would not be a question of whether he said so or didn't as in the case with Mr. Parsons. The two points I particularly refer to are, this pin-head business and the clique. Mr. Parsons and Mr. Henderson have answered very clearly the other parts, and while Col. Maclean's stories were very nice, and the one statement he made about 'Made in Canada' was interesting, still he didn't attempt to answer Mr. Parsons in any way. (Hear, hear.) About pin-head—I want to ask Col. Maclean (he must have in his mind who the pin-head is or who the pin-heads are), I want to ask him, Am I one of the pin-heads? Go to it, Colonel, it is your turn."

COL. MACLEAN: "Possibly when you finish your speech I may be able to say."

MR. HARRIS: "I want to tell you after all that has been done and said, without he can verify it—and I think he will have some going to do it, because his success doesn't match up any greater than the success of other men who have taken an active interest in the Manufacturers Association—I want to say the act is an act of a yellow cur. I want to put it as strong as I know how personally, and if you don't understand the language of it, a cur is the lowest breed of a dog and the yellow one is the lowest breed of a cur."

THE PRESIDENT: "Order!"

MR. HARRIS: "I take it as personal to my own self, and I am addressing the Colonel on the matter; I don't intend to take it any longer, and I take it personally because I am a member of that Executive Council and have in the fifteen years been there steadily. Now let the Colonel answer."

Motion is Carried

THE PRESIDENT: "Gentlemen, I don't think any good is going to be served by prolonging this thing. I think, gentlemen, that the members of this Association have judged and answered by their applause as to what they think. Now, gentlemen, I confess to you, coming as I do, 1,400 miles to a meeting of this Association, I do not want another hour spent in just this way. I think, gentlemen, if it is your desire to find a seconder to Mr. Bittues' motion, and refer it to a committee if you wish, you can do so, or do anything with it that you like. I confess to you, as far as the West is concerned, that many of the *Financial Post's* statements are quoted against us continually, but I don't think that that warrants the annual meeting of the Association spending an hour on it, and I would like, if you wish, to have a seconder to the motion."

MR. ROBSON (Edmonton): "I come 2,600 miles from Edmonton, and I will second the motion."

MR. BITTUES: "With Mr. Robson's consent, I would withdraw the second half of my motion, but I think we would all like to see a vote of confidence taken on behalf of the Executive and officers who have been more or less assailed."

Mr. Robson gave his consent as seconder, whereupon the President put the motion which was carried with applause.

The Financial Affairs of the Association

Deficit of $1,562 Reported for the Last Fiscal Year—Fine Performance of INDUSTRIAL CANADA Department Commented Upon—Association's Investments Remain Intact Despite the Greatly Increased Expenditure

Report Presented by

J. F. ELLIS

Treasurer, Canadian Manufacturers Association

THE financial report of the Association for the year ended April 30, 1919, was presented at the conclusion of the morning session on Tuesday, June 10, by Mr. J. F. Ellis, treasurer of the Association. Mr. Ellis said: "Mr. President and gentlemen, you have in your possession the printed copy of the financial statement, so that it is not necessary for me to go into details. I will merely read the auditor's report.



B. and C. Press photo

J. F. ELLIS
Barber-Ellis, Limited, Toronto
Re-elected Treasurer, C.M.A., 1919-1920

"In the Executive Committee's report reference is made to INDUSTRIAL CANADA. I want to give you one or two figures which you don't have in that report. You have in that report the revenue for the past year of INDUSTRIAL CANADA; it runs a little over $49,000 for advertising and other little items. I just wish to compare that with the year before, when it was $35,000; the year before that, $27,000; the year before that, $22,000, and in 1915, $24,000. This is most gratifying. We have a valuable asset in INDUSTRIAL CANADA. You know the profits last year reduced our overdraft by over $8,000, and I trust the membership will give INDUSTRIAL CANADA its hearty support, and I feel sure the Committee intend this year to improve it so that it will be in greater demand than ever.

"I have much pleasure in moving the adoption of the Treasurer's Report, seconded by Mr. Howard."

The President put the motion to adopt the report, which on a vote having been taken, was declared carried.

Toronto, May 22nd, 1919.

The President and Members,
Canadian Manufacturers' Association, Inc.,
Toronto.

Gentlemen,

We have audited the Books and Accounts of the Association for the year ending 30th April, 1919, and attached hereto please find Balance Sheet, Revenue Account, etc., duly certified to by us. We have also verified the Cash and Bank Balances and the Investments, as shown in Schedule E.

Yours faithfully,
WILTON C. EDDIS & SONS.

BALANCE SHEET, 30TH APRIL, 1919.

30th April, 1918.			30th April, 1919.
	LIABILITIES.		
$2,773 21	Accounts payable, Schedule C		$5,682 29
	Publicity account, balance	$442 91	
375 00	Scholarship Fund, balance	507 00	
			949 91
31,699 53	Fees paid in advance	$33,539 58	
689 42	Buyers' Guide and subscriptions to INDUSTRIAL CANADA, paid in advance	674 43	
			34,214 01
	Revenue Account:		
46,730 81	30th April, 1918. By balance	$46,730 81	
	30th April, 1919. To deficit for year	1,562 34	
			45,168 47
$82,267 97			$86,014 68
	ASSETS.		
$13,393 42	Cash on hand and in bank, Schedule D	$9,681 68	
53,632 59	Investments, Schedule E	53,700 00	
1,172 24	Interest accrued on above	974 77	
$68,198 25			$64,356 94
	Accounts receivable, INDUSTRIAL CANADA	$11,105 83	
	Less reserve for bad debts	1,000 00	
7,796 73		$10,105 83	
1,033 75	Sundry debtors, Schedule F.	3,687 82	
476 24	Members' fees, accrued and due	308 75	
			14,102 40
4,763 00	Furniture and fittings		7,555 34
$82,267 97			$86,014 68

Audited and found correct,
WILTON C. EDDIS & SONS,
Chartered Accountants.

REVENUE ACCOUNT.

For Year Ending 30th April, 1919.

To Expense, Schedule A	$86,869 04	
" Depreciation, furniture	839 48	
" Companies' test cases	500 00	
" Publication, Parsons-Emery speeches	8,737 59	
" Lyons Fair	1,041 85	
By Membership fees		$84,467 52
" Interest		3,132 02
" INDUSTRIAL CANADA, Schedule B		8,636 62
" Trade Index, 1916		189 46
" Deficit for year carried to Balance Sheet		1,562 34
	$97,987 96	$97,987 96

SCHEDULE A.

EXPENSE.

For Year Ending 30th April, 1919.

Annual Meeting		$1,017 12
Branches, exclusive of furniture—		
British Columbia	$5,337 82	
Hamilton	739 96	
Maritime Provinces	3,564 77	
Montreal	6,381 86	
Ottawa	5,209 21	
Prairie Provinces	8,346 53	
Toronto	2,491 89	
		32,072 04
Certificates		308 79
General counsel fees		3,450 00
Departments—		
Commercial Intelligence		4,715 40
Tariff		9,303 54
Transportation		15,376 63
Exchange		71 65
Postage, general		1,055 56
Printing and stationery		2,067 12
Rent and light		1,472 04
Salaries		15,063 88
Sundries		1,077 76
Telegraph and telephone		430 52
Translations		Cr.102 12
Travelling, general		548 60
		$87,928 53
Less Insurance Department, credit		1,059 49
		$86,869 04

SCHEDULE B.

INDUSTRIAL CANADA.

Statement Showing Income and Expenditure for Year Ending 30th April, 1919.

INCOME

Advertising display	$47,629 72
Advertising Buyers' Guide	1,270 33
Sale of copies	251 85
	$49,151 90

EXPENDITURE.

Electros	$523 22
Special literary matter	643 15
Postage and distribution	1,627 40
Printing and stationery	26,106 65
Rent and light	1,100 04
Salaries	10,643 88
Telegraph and telephone	73 13
Travelling	191 30
INDUSTRIAL CANADA prizes	190 00
Sundries	56 51
	$40,155 28
Profit for year	8,996 62
	$49,151 90
By profit for year brought down	$8,996 62
To provision for Income Tax	360 00
By balance carried to Revenue Account	$8,636 62

SCHEDULE C.

ACCOUNTS PAYABLE.

Methodist Book Room	$1,872 32
National Manufacturers' Association	4 00
Bell Telephone Co.	40 20
C.P.R. Telegraph Co.	31 04
G.N.W. Telegraph Co.	15 15
T. Eaton Co., Ltd.	84 75
H. Dalton, expenses	191 38
G. E. Carpenter, expenses	5 33
Dominion Press Clipping Co.	50 00
Legal expense	550 00
Sundries	100 00
	$2,944 17
Toronto Branch, suspense	1,684 07
Provision for Income Tax, INDUSTRIAL CANADA (two years)	520 00
Trade Index, 1919, received in advance	105 75
INDUSTRIAL CANADA, received in advance	428 30
	$5,682 29

SCHEDULE D.

CASH ON HAND AND IN BANK.

Cash—	
Toronto	$225 00
Montreal	125 00
Winnipeg	200 00
Vancouver	200 00
Cash account, stamps, Toronto	88 55
Bank	8,843 13
	$9,681 68

SCHEDULE F

SUNDRY DEBTORS.

Pulp and paper section, Feb.-April, 1919	$565 75
Tanners' Association, July, 1918 to April, 1919	171 92
Willis, Faber & Co., rent arrears	2,139 25
" " " rent, April	98 16
" " " telephone	31 00
Trade Index, 1919, expenditure to date	651 29
Sundries—translations and 1916 Trade Index copies	30 45
	$3,687 82

SCHEDULE E.

INVESTMENTS.

Due Date.		Rate of Yield.	Yield.	Par Value.	Amortized Value.
1 July, 1944	City of Toronto Bonds	3½%	4.25%	$4,866 67	$4,301 72
1 Sept., 1920	City of Hamilton	4%	4.22%	4,000 00	3,988 37
1 Jan., 1941	City of Stratford	4½%	4.25%	10,000 00	10,334 84
30 June, 1942	Riordon Pulp & Paper	6%	6.1%	5,000 00	4,957 51
1 July, 1948	City of Toronto	4%	4.75%	6,236 66	5,577 67
1 Oct., 1932	City of Brandon	5%	5.1%	10,000 00	9,903 16
July, 1925	City of Toronto	4½%	5.4%	5,000 00	4,770 88
1 Dec., 1927	Dominion of Canada War Loan	5½%	5.8%	10,000 00	9,866 34
				$55,103 33	$43,700 49

A Review of the Association's Activities

Considerable Attention Paid to the Labor Question during the Past Six Months—The Tariff Question Again to the Fore—Progress Made by the Association—Work Done by the Executive Council

By W. J. BULMAN

President, 1918-1919, Canadian Manufacturers Association

MR. BULMAN'S INTRODUCTORY REMARKS

BEFORE attempting to read the presidential address, I would like to say, as you all know, that we in Winnipeg have been immersed in a strike. It is more than an industrial dispute. It is practically a revolutionary movement, and all our time has been entirely devoted to that. I myself have not left the Citizens' Committee Headquarters since the day the strike opened until I ran away to catch the train to come down here. You can imagine, therefore, my contribution to the Annual Meeting must of necessity be very limited. We have up there the labor situation in its most acute form. The trade dispute—that is, the dispute between employer and employee—is entirely left in abeyance. Nothing is being done with that until the question of who governs the country is settled; until the question of whether a sympathetic strike can succeed as against a whole community; whether that challenge to the whole community can be made good. Most of the right-thinking labor people are practically in the Citizens' Committee, but are intimidated into remaining away from their employment. The situation up there is developing siege tactics, and when it will be over no one knows. But I can tell you this, that the citizens of Winnipeg, represented by the Citizens' Committee, represented by a Committee that was last Sunday morning, in the auditorium, 6,000 strong, to hear the report of its representatives—and these men, although they are tired working in the fire-halls and barracks, and all the other activities the citizens are carrying on, every one of them is determined the thing will be fought to a finish. Now, we don't want to discuss the labor situation in Winnipeg, but I thought that being before a body of men who have given their entire life to the development of industry in Canada, you would, without any explanations, be able to appreciate the importance of that contest in Winnipeg. We are not opposed, any one of us, to the labor union; we are not opposed to collective bargaining; but we are opposed to one big union, and we are opposed to sympathetic strikes in public utilities, and until those questions are settled you need not look for any adjustment of the trade disputes in that section of the country.

WHEN we were assembled in annual meeting last year the war had reached one of its darkest periods. The Germans had dealt a heavy blow against the Allies on the western front and were concentrating for a thrust against Paris. What history-making changes have occurred since our last meeting! The foe has been overwhelmed on the field and forced to sue for peace; his navy has been delivered to the Grand Fleet and rides at anchor in Scapa Flow; the Peace Conference has re-drawn the map of the world; the new nations look forward to freedom; and (important to us at least) the Canadian Army, after winning imperishable glory, is nearly all at home again.

As enlistments from those associated with industry were greater than from any other occupation, the industrial life of Canada was intimately connected with and greatly affected by the war. Consequently, the dislocation was great when these thousands of men passed into the army, and it is great when they are returning to civil life. We do not wish to enlarge on the part played in the war by Canadian industry, including both employers and their employees. All tried to do their duty, whether that duty consisted in fighting, or making munitions, or producing other war supplies, or contributing to war funds, or manufacturing goods for the civilian population. It is preferable to leave to others the estimation of the manner in which these duties were performed. The Imperial Government and the leaders of the allied forces have borne frequent and complimentary testimony to the activities of the Canadian Army on active service; and in reporting to the Imperial Government for the year ending 1917, the War Cabinet of Great Britain, speaking of Canadian industry, said "The manufacturing forces of Canada have been mobilized for war production almost as completely as those of the British Isles. Their just portion of such commendation is gratefully appreciated by those engaged in Canadian industries.

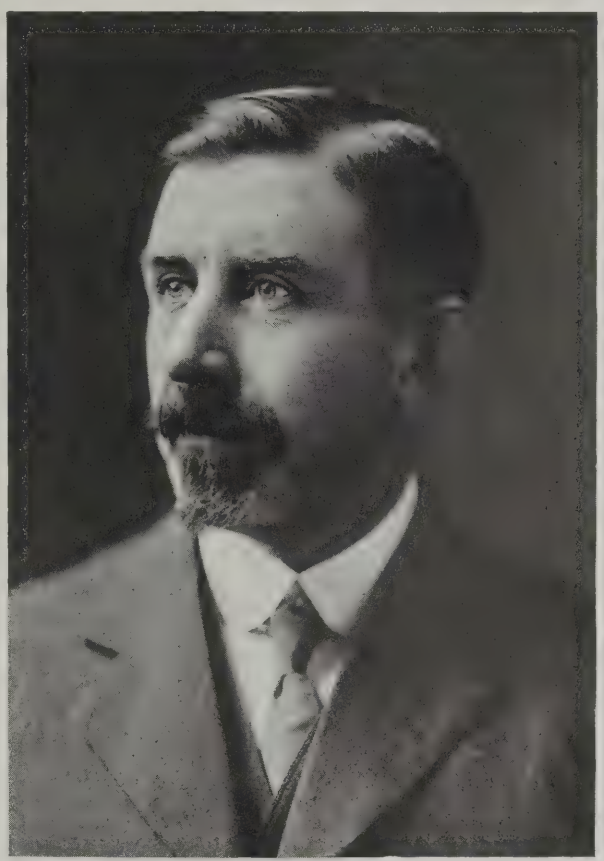
When the armistice was signed, the majority of the people in Canada did not expect the end quite so soon. The economic situation contained all the elements of widespread unemployment. Munition-making and other war production stopped immediately, because it was impossible for firms to continue manufacturing goods for which there was no sale. Over 300,000 soldiers were still in uniform, and provision had to be made for them on their return to Canada. A very trying winter was passed with fair success, and with less unemployment than might have been expected under the circumstances. This fortunate result was accomplished through the united efforts of the Dominion and Provincial Governments, the employers, the municipalities, the various soldiers' societies, and the workers' organizations, all of which, for the greater part, took a reasonable attitude that assisted materially in averting the threatened crisis.

But we have not yet passed the period of readjustment from war to peace conditions. We went successfully through the war; we have got through most of the work of demobilization; but there are problems now facing us which are quite as difficult as those arising out of the war or demobilization, and we will be very fortunate if they are solved as safely and successfully. The chief problem, which contains the elements of practically all others, is that which has excited the fiercest controversies for centuries; namely, the constitution of society. The Royal Commission on Industrial Relations, created by the Dominion Government, has finished its sittings in all the chief industrial centres from coast to coast. This Commission has created an open forum where all might state, not only their grievances, but also their conception of the laws and practices which should govern the social structure.

During the past six months, the Association has devoted considerable attention to the labor question. Council instructed that in all industrial communities steps should be taken to bring employers and employees together for the purpose of discussing the labor situation, and to suggest remedies for existing difficulties. Moreover, the Association co-operated officially with the Department of Labor, and has done everything in its power to carry out the suggestions made by the Minister of Labor, and also to co-operate with the workers generally. We can state, from our experience during the past six months, our firm belief that the

majority of Canadian industrial workers are reasonable people, and that their views can be met without undue hardship to industry. They realize that in every industrial company there is a limit to the amount which can be set aside to pay wages, and also that a certain number of hours of labor must be expended on production in order to keep their company operating in competition with other Canadian and foreign firms.

While the general result of our negotiations with employees has been satisfactory, in one particular we have failed entirely, and that is in dealing with the extreme element which has made its appearance for the first time in Canadian industrial history. These extremists are impregnated with the ideas which brought about the Russian catastrophe. They are revolutionary in their methods and revolutionary in their speech. It seems impossible to negotiate with them. They do not ask for a peaceful solution. They appear to want war. Literature was confiscated recently in various parts of Canada which advocated that the "proletariat" take up arms, and, if necessary, wade through blood to achieve their ends. Briefly, they consider that only certain manual laborers have any rights either to control property or to have any share in the Government. They believe that all other classes should either be "abolished," or brought under the control of their committees. They do not believe in private property, or bank interest, or capital All these things should be "abolished." They ask that "the instruments of production" shall become common property. They specifically state that all farms should be confiscated, and given to the poorer agricultural laborers. When a number of these revolutionaries were arrested recently in Toronto, it was found that the leading spirit was a Russian student who had come to this country from the United States, and that his two chief assistants were a man and a woman who were both Germans. If this country is to retain confidence in organized labor, the trades and labor unions will have to denounce any of their members who hold and preach seditious doctrines that are repugnant to the common sense of the Canadian people. Private property is not going to be eliminated. Revolutionaries cannot convince a million farmers in Canada that they should hand their farms over to anybody. They cannot persuade some hundreds of thousands of Canadians who own small shops, that they should relinquish possession. They cannot convince other hundreds of thousands who have accounts in the banks, that their savings should be put into a common purse. They cannot convince some millions in Canada, many of them wage-earners, who own or are paying for their houses, that these houses should be given to Soviets, as they were in Russia, for the purpose of billeting the chosen friends of the Soviets. They cannot convince the owners of factories, whether individuals or stockholders, that their rights under the law are an illusion. They cannot convince any loyal citizen who has acquired property by industry and thrift, that he is not entitled to the free use and possession of it. It is only safe to judge a social theory by its accomplishments, and what have been the accomplishments of the Russian experiment? The Russian Soviets acquired and maintain their power by means of a mercenary army which massacres all who offer resistance or even remonstrance. The material results of the Russian revolution were briefly: First, the withdrawal of Russia from the war, and the consequent increase in loss of life and money to the Allies; second, the paralysis of Russian industry and transportation; third, the impoverishment of the Russian farmers, whose crops were taken by the Soviets or committees of workmen without payment. The new rulers of Russia hoped to introduce an industrial millenium, but they caused industrial chaos.



B. and C. Press photo

W. J. BULMAN
Bulman Bros., Limited, Winnipeg
Past President, Canadian Manufacturers Association

In April of this year, the British Government published a White Paper entitled, "Bolshevism in Russia." This remarkable document is a compilation of various reports received by the British Foreign Office from its agents in Russia, letters and other statements from credible eye-witnesses of the Russian revolution. The British White Paper shows the effect of Soviet control of factories as described by a British agent who left Petrograd in November last:

"Russian industry is dead for the moment, and the Russian industrial workman has ceased to exist as a class for the time being. It is an extremely curious feature of the Russian revolution that a movement which has proclaimed itself as social and democratic has achieved in the first instance total destruction of those social groups on which a social democratic organization is mainly based, and the class of the industrial workmen. All factories, all the important ones with a few exceptions of those who are still engaged on munition work, are stopped, and the industrial workman had either to return to the village with which he had no more ties in common, or to enlist in the Red army. The younger generation of the workmen, men of 19 to 26 years, have to a great extent chosen the second alternative, and it is they who form the Bolshevik nucleus of the Red army. To speak of the growing success of the management of industrial concerns by Soviet is an absolute misrepresentation. It would be sufficient in order to disprove this statement to cite the instance of the most important factories and works in Petrograd, Moscow and Nishny, where factories which engaged usually many thousands occupy now a few hundred men."

Another British agent, Mr. Alston, wrote as follows to Earl Curzon:

"At the principal factory at Kolomna, a town on the Moscow and Kazan Railway, there are only about 5,000 workers

out of the normal total of 25,000. The factory is run by a committee of three—one workman, one engineer, and one director. Here, as everywhere, all the workmen are discontented and would much prefer the old management. The situation is intolerable. Nobody works and nobody wants to work, while the one and only topic of conversation is food. All the people are discontented because they have not got enough to eat."

What happened to special trades is shown by the following synopsis of the reports published in the British Government's White Paper dealing with conditions in October, 1918:

Metal Trades—practically at a standstill.
Linen Trades—50 per cent. of normal.
Woollen Trade—Production decreased 60 per cent. Stoppage during summer of one to three months in all the mills.
Cotton Trade—Production decreased 60 per cent. below normal.
Silk Trade—Greatly decreased, 60 per cent. of normal.
Coal Trade—60 per cent. of normal. Shortage caused by absence of work people.

The Bolsheviki rulers of Russia have divided the people into four categories, the army and manual workers being in the first and second categories, other workers and "intellectuals" being in the third and fourth. The scanty provisions are doled out by food tickets and the following proclamation, issued at Petrograd on October 9th, 1918, shows what the people can get with their cards:

"The Commissary of Food of the Petrograd Labor Commune informs that on Friday, Saturday, Sunday, and Monday, for four days, the following products will be given, on the presentation of the bread cards, according to category:
1st category—1 lb. (Russian) of bread, and 3 lbs. of potatoes.
2nd category—½ lb. of bread and 2 lbs. of potatoes.
3rd category—¼ lb. of bread and 1 lb. of potatoes.
4th category—½ lb. of potatoes."

In a report received by the Foreign Office from a British agent in Moscow on February 8th, 1919, the following statement appears:

"The difficulty, however, is that no food, except black bread, is available for distribution, and the quantity of bread distributed at present, namely ½ pound for the first category, ⅜ pound for the second, and the ¼ pound for the third, is completely insufficient to keep one alive."

Nominally, the new Russian industrial rulers granted extraordinary increases in wages, running generally from 1,200 to 1,300 per cent., the greatest increase being in the textile industry, where it reached 1,736 per cent.

But what can the unfortunate Russian workmen buy with their high wages? The following is a table of prices current in Moscow on December 15th, 1918, in Canadian money:

Potatoes (mostly rotten)	$5.00 per lb.
Salt fish (bad condition)	4.50 per lb.
Bread (by card)	.75 per lb.
Pork	25.00 per lb.
Beef	11.00 per lb.
Tea	40.00 per lb.
Butter	40.00 per lb.
Suit of clothes (ordinary)	400.00 per suit.
Pair of shoes (poor quality)	200.00 per pair.

The Russian revolutionaries forget that the nominal amount of wages means nothing; the purchasing power of wages is everything. Most people in Russia stopped working steadily because they thought they were getting such high wages that they were rich. But Russian ground did not produce crops without work; Russian factories did not make goods without work; and, consequently, Russia is starving.

The Canadian Manufacturers Association does not take the view that our industrial system is perfect, or that either our form of Government or the structure of our society admits of no improvement. But we believe that much progress has been made by enlightened study and co-operation during the past centuries, and we contend that further progress can be made by the same methods. Of the two methods of improving unsatisfactory conditions—the Russian way and the British way—we prefer the British way.

The revolutionaries ask us to abolish the present economic system, and to substitute another which none of them defines.

In the discussions about the high cost of living, there is a tendency to forget the historical fact that great wars are succeeded by great scarcity, which often approaches famine. During four and a half years the energies of the civilized world have been devoted to destruction. Food and all kinds of material have been wasted in stupendous quantities. Production has been restricted through diversion of effort. The result is a world scarcity. Articles are dear now because they are scarce, and they will be dear until they become plentiful again. Other minor factors contribute, but this is the chief explanation of the high cost of living.

Salvation in More Work

Therefore, our only salvation is not in doing less work but in doing more work. The war has increased our debt. We have fewer hands to do the work that is necessary to provide for our wants and to pay our debts. Our forests can only be converted into lumber, then into money, and then into food and clothing, through the efforts of all connected with the lumber industry. The ore in the mines is useless until it is in a marketable condition. The land is fruitless until it is tilled and reaped. We have great stores of raw material, but they are valueless without work, and work must be defined in the broadest sense, the work of brains, the work of capital, and the work of hands. Directing ability, capital and labor are the three ever-present and indestructible factors of industrial production; they have existed since the beginning of civilization; and no practical system has been devised which dispenses with any of them.

So far we have been dealing with the extremists who take the view that the present social system must be abolished, and that another system must take its place.

The grievances of the wage-earners who are not destructive revolutionaries may be concentrated into three demands:

(1) They want a shorter working-day.
(2) They want more pay for the shorter period of work than they now receive for the longer period.
(3) They want to share in the control of industry.

What is the average day's work for all the people of Canada, both men and women? The farmers, for example, work about twelve hours a day in summer, and at least ten hours a day in winter, six and part of the seventh day; the retail storekeepers' average at least ten hours a day, and the housework done by women occupies their time probably ten or twelve hours each day. Few employers escape with less than ten or twelve hours. It is conceded that the day of factory-workers should be as short as possible because of the confining nature, and in some cases, on account of the laborious character of their employment. But, as a certain amount of national work must be done, it follows that, if a certain class of the population gets its working hours reduced, it seems reasonable to assume that other classes of the population will have their hours increased. That is, if the shoemakers shorten their day, the price of shoes must rise, and purchasers must work longer to pay the extra cost of their shoes.

While the gross national income varies yearly, the people have a fixed amount to spend each year. If the wage-earners get a fifty per cent. increase, and do less work for it at the

new wages than at the old, it follows that all other classes who are not wage-earners will have smaller incomes.

One of the fundamental facts underlying the social structure, is that no one class can long maintain rights, privileges or compensations which are denied to other classes. If the manufacturers, for example, are too greedy and are getting remuneration for their services beyond the value of those services to the country, the other classes of the country will very soon reduce that remuneration. If the farmers make unreasonable demands, all the other classes in common defence will quickly unite against them. If the industrial wage-earners are unreasonable in their requests for shorter hours and higher wages, all the other classes in the country will at once see that their interests are in danger; that this one class is determined to take something away from other classes. Consequently, the selfish demands of any single class cannot long prevail. Therefore, a body such as the Royal Commission on Industrial Relations is bound to do good. The opinions and demands of every class are freely published and discussed. As these become known they are analyzed, criticized and weighed by all other classes, and a verdict is reached as to whether such demands can be granted without undue danger to the common interest.

As for the control of industry, the expression "self-government of industry" is misleading. The direction of industry has little parallel with the government of a country. The Government has complete control over its citizens; it has the power of life and death, the right to give or take away property. Industry has no such control over its employees. Nearly all the heads of Canadian industries were once workmen themselves. They have risen to their present positions by ability, perseverance and thrift. The most difficult thing to get to-day is managing ability. The directors of Canadian industries are not trying to keep men down, they are trying to fit them to assume the responsibilities of management. They are ager to find ability, to reward it, and to place it in responsible positions where it will share in the control of industry. The purchase of stock is open to employees in many industrial companies, and employees have the same opportunities as other men who have succeeded, to save and invest their money. Thrifty workers aspire to be property-owners, or, in other words, capitalists. Such men despise communism, that paradise of wastrels, who having neglected their own opportunities, seek to rob those who have acquired possessions through the exercise of industry and self-denial. Can any system, which removes the incentive furnished by ambition, succeed? Sooner or later reactionaries and revolutionaries are brushed aside, and the great mass of moderate opinion crystallizes into the necessary action to solve problems as they arise. We must think as a nation on all these big subjects and not as a class, because only those demands which satisfy the nation as being best for the nation will be granted by the nation. The nation will ultimately determine the merits of the cases presented. There will be one test applied, and that is the question: What is the best solution for the country as a whole? I think the Executive Council and this annual meeting firmly believe that all industrial employees, and all other wage-earners, are entitled to, and should have as short hours and as high wages as the rights of all other citizens and the competition of other nations permit them to enjoy.

The Tariff

The past year has marked the revival of the agitation for lower tariffs and reciprocity and freer trade. The Association, which has always supported the policy of adequate protection for Canadian industry and agriculture, maintained that position, and urged upon the Government and the public the danger of departing from the national policy when the country is being readjusted from a war to a peace basis, when it is necessary to find employment for the army and for the war workers, and when nearly every other country in the world is either retaining or increasing the protection given to its own industries. It is interesting to note that the economic history of the western United States is being repeated in Western Canada. Successive agrarian movements in these Western States agitated to secure free trade and wider markets, but when great industries located in the West and built up large cities these agitations subsided. It is inevitable that a similar change will take place in Western Canada. A number of cities in the Canadian West are already industrial centres, and it is certain that other industrial centres will spring up as the population grows and creates a market for manufactured goods. When the value of the home market was demonstrated through the creation of industrial cities in Ontario and Quebec, those who clamored for free trade and lower tariffs dwindled into a weak minority. Canada has never had a high tariff. The fact that our imports have always greatly exceeded our exports, except in the abnormal conditions of war times, supports this statement. For years the United States, for example, has sold us from 50 to 100 per cent. more than we have sold to them. Moreover, their sales to us have been largely finished products, while our sales to them have been largely raw material.

A Comparison

We must realize that Canada, although greater in area than the United States, is practically a fringe four thousand miles long and about one hundred miles wide along the northern boundary of the United States. We must also remember that the United States has a population of over one hundred millions against our eight millions, is highly industrialized, and one of the richest trading nations in the world.

I do not think Canadians can ever forget the correspondence which passed between Ex-President Taft and the late Ex-President Roosevelt while the Reciprocity Agreement of 1911 was still under discussion, and which was published by Ex-President Taft on April 25th, 1912, in Boston, Mass., after the famous Taft-Roosevelt quarrel over the nomination for the Presidency of the United States. Ex-President Taft wrote as follows to the late Ex-President Roosevelt:

"The amount of Canadian products we would take would produce a current of business between Western Canada and the United States that would make Canada only an adjunct of the United States. It would transfer all their important business to Chicago and New York, with their bank credits and everything else, and it would increase greatly the demand of Canada for our manufactures. I see this is an argument made against Reciprocity in Canada, and I think it is a good one."

The late Ex-President Roosevelt replied as follows:

"It seems to me that what you propose to do with Canada is admirable from every standpoint. I firmly believe in free trade with Canada for both economic and political reasons."

These two men, among the greatest the United States has produced, saw very clearly that it would be a great advantage to draw on the immense natural resources of Canada for raw products, ship these products south to be manufactured in United States factories and reship the finished goods north for sale in Canada. Ex-President Taft stated the matter very clearly. Most of our business and the population engaged therein would move to the United States, leaving the Canadian people to be chiefly producers of raw material. If we are to maintain our national identity we must shape

our fiscal policy to that end. There is no doubt that if we should enter into a binding trade agreement with the United States, our trade policy would be dictated from Washington and not from Ottawa. Is it reasonable then that we should break down our tariff walls against the United States and lose our nationality? We want to maintain the friendly relations with the United States that have existed for over one hundred years, but as this war was fought largely to safeguard the rights of small nations, and as Canada earned her right during the war to be a nation, we are only asserting that right, and we believe that the United States, which has championed the cause of small nations, will be the first to concede and respect our ambition.

We want to retain in Canada our own citizens, to provide them with employment at fair wages, to build up a diversified nation, to develop our raw materials and our natural resources, through the efforts of Canadians, and to secure the rewards of industrial enterprise for Canadians. Canada is one of the few countries of the world possessing vast natural resources in a largely undeveloped state, and consequently, the eyes of the world are turning enviously to this country, and if we do not take proper precautions, we shall lose the added value which would be created by completing manufacturing processes in this country. We do not wish our heritage to pass into alien hands.

This Association believes that we need a tariff revision in Canada. The tariff has not been revised since 1907, and there never has been a scientific and thorough revision of the tariff in this country. The conditions of industry should be thoroughly investigated and analyzed by a competent body, say a tariff commission, acting in an advisory capacity to Parliament, and this commission should consist of properly qualified men rather than representatives from any particular class. If seven men were appointed, for example, we think they should be men who have made a thorough study, or are capable of making a thorough study of tariffs generally, and of Canadian tariffs particularly. We believe that the underlying principle which should govern the theory and practice of this commission, or similar body, should be to determine what tariff is best suited to the country. We manufacturers know that in the end we shall pay dearly for privileges which are not in the best interests of all. The only tariff which will suit Canada is a tariff which will prove beneficial to the greatest number of people in Canada. A tariff which will please the farmers only will not be in the best interest of the whole country; a tariff which suits the consumers only, by enabling them to buy indiscriminately with no thought of providing employment for other Canadians, will not be ultimately satisfactory. A tariff commission, and Parliament in ratifying the findings of a tariff commission, should steadily keep in mind one question: What tariff and what fiscal policy will do most to make Canada a great and prosperous nation within the British Empire? All other considerations should be sacrificed to attain this object.

Preferential Tariffs

The Imperial policy of preferential tariffs, which has been announced by Great Britain, marks a new period in Canadian history. It signifies closer trade relations between the various parts of the British Empire. It means that a great effort is being made by the various British peoples, who gained common respect for one another during the tremendous struggles of the war, to co-operate in building up Imperial trade. Canada is the pathway from Great Britain to the East, and one link in the chain which encircles the earth binding together the various nations of the Empire.

We must have a united country. Canada has always been a most difficult country to govern. We have been constantly torn with dissensions. We have the two principal races—British and French—and many of the earlier problems of this country were caused by the difficulties of reconciling the inherited prejudices resulting from several centuries of conflict between these two races in Europe. We believe that these prejudices are gradually dwindling, and that a liberal display of tolerance by both parties will cause their ultimate disappearance. We must recognize the fact that two main races are here. One represents about a third of the population of Canada, and the other nearly all the remainder. As neither of these sections of the population can very well be moved out of Canada, we must make up our minds to agree. Their futures are inseparable, and our efforts should be concentrated on bringing the best qualities of both races to bear on the solution of common problems, rather than on stimulating those passions and prejudices which drive them further apart. Let us wipe off the slate and start anew.

The broadening of our immigration policy brought in a heterogeneous population from Europe, much of which is not yet assimilated. The war withdrew a great many of the enemy aliens, and a considerable number of the friendly and neutral aliens. Nothing is to be gained by conducting a campaign of persecution against aliens indiscriminately. The friendly aliens are citizens of the nations with which we were at peace, and both friendly and neutral aliens were invited to the country, and in fact encouraged to come to the country by our Government. In many cases they are doing work which Canadians do not care to perform, and are doing it well. While they observe the law they are entitled to its protection and the privilege of earning a living.

The Case of the Alien Enemy

With enemy aliens the question is different. These people are here only on good behaviour. Many of them have shown themselves undesirable during the war. We cannot allow enemy aliens, or even neutral and friendly aliens, to conduct any propaganda which is aimed at the peace and good government of this country. Especially we cannot tolerate any invidious comparisons which are made between the government of this country, and the temporary and experimental governments in certain other countries. If suggestions are made that Canada should abandon our type of government, which is thoroughly British, in favor of an un-British type of government, there should be no hesitation about deporting immediately all who are concerned in the teaching of such doctrines. If, for example, they admire the Government of Russia more than the Government of Canada, they should be given the privilege of living under the Government of Russia rather than under the Government of Canada. All this, of course, is subject to the assumption that Canadians come first in business or in securing opportunities for employment, and that returned soldiers come first among the Canadians.

It is gratifying to note that the progress of this Association has more than kept pace with the country's development. During the period between 1900 and 1917, according to the records of the Dominion Bureau of Statistics, the percentage of increase in the various factors of industry in this country has been as follows:

Establishments	135 per cent.
Capital	520 " "
Number of employees on salary	140 " "
Salaries paid	305 " "
Number of employees on wages	100 " "
Wages paid	410 " "
Value of products	526 " "

The growth of this Association has exceeded comparatively the development of national industry. We are now

entering what may be called the third period of the Association's history. The first period preceded 1900, when the Association was provincial and consisted of a few members in Ontario and Quebec. When it was incorporated in 1902 its membership was about 300. During the second period, from 1902 to the present, the membership has grown from 300 to 3,530, an increase of over 1,100 per cent. These seventeen years have seen the Association spread all over Canada, and establish branches from the Atlantic to the Pacific. During the period we are entering, much intensive organization should be done on the framework which has been already created, and to this end a proposal will be submitted to you at this meeting to sanction the grouping of the Association for administrative purposes into five divisions with branches in each division.

The Executive Committee believe that the following principles should be developed: First, greater centralization of the executive powers to deal with policies and the chief problems of administration; second, the decentralization of details and the relegation of local matters to the communities which they affect. It is hoped in this way to secure rapid and competent action on matters which have a national application, and also to see that matters which have a provincial or local application, do not fail to receive proper attention. It is hoped that interest will be stimulated in every industrial community where we have members, and that these members will be encouraged to help the Association by every means within their power.

Policies of the Association

During the year, the Executive Council has endeavored to carry on the established policies of the Association, and where necessary, to enunciate new policies.

It is our policy to encourage and develop the growth and influence of the Association in the four Western Provinces. The work done to date has been very satisfactory, but much greater progress is desirable. We do not want to see Eastern Canada devoted chiefly to industry and Western Canada mainly to agriculture. Industry and agriculture should flourish side by side in all parts of Canada. It is most important that Eastern firms establish branches in Western Canada, and it is gratifying to record that the success attained by those who have followed this policy is inducing other to imitate them.

Council supported legislation to secure a Bankruptcy Act, uniformity of commercial law, an Act providing for Technical Education, and other legislation that was beneficial to industrial progress.

Council strongly approved the action of the Government in sending the Canadian Mission to London. The remarkable success of the Mission has entirely justified its appointment. Mr. Lloyd Harris, Mr. Frank P. Jones and the other members of the Commission, in assisting to secure the removal of the restrictions imposed by the British Government against colonial goods, and in securing additional ocean space, rendered an invaluable service to Canadian manufacturers. The Canadian Trade Commission in Ottawa, in spite of frequent changes in the personnel of its members, also has given assistance, and both Commissions have co-operated freely with this Association. The Association, on the advice of the Canadian Mission in London, immediately after the armistice, advocated the sending of individual representatives by all manufacturers to Europe, and where individual firms did not care to undertake such expense, that groups should organize and send representatives. The question of foreign trade now as always, is an important one for this country. It is a most difficult thing to build up foreign trade. It is easy to deal in generalities and to state what is desirable, but not so easy to show what is possible and profitable. But the necessity to increase our foreign trade is very urgent. Canada was exporting about $700,000,000 worth of manufactured goods annually when the armistice was signed. During the last year before the war, we exported manufactured goods to the value of only $57,000,000. The difference, of course, was largely made up of munitions and other war supplies. Another serious feature of the situation is that our small export trade before the war was built up on pre-war wages. The increase during the war was built up on war-time wages. The question is: How are we going to build up new export trade to replace that which disappeared with the close of the war, and still continue to pay war-time wages, and wages even higher than those paid under war conditions, unless similar conditions prevail in other countries?

Meeting the War Debt

But even this is overshadowed by the alternative question: How is Canada to pay her war debts if her exports are not greatly increased?

Transportation is to-day as it has always been, one of our most difficult problems. It is always a difficult question in a new and thinly-settled country. We have reason to be proud of our Canadian transportation systems, because they stood the strain of changing conditions of war and demobilization as well as, or better than, the transportation systems of the principal countries of the world.

A great experiment is being tried now in the Government ownership of railways. While this Association in annual convention at Winnipeg, in 1917, declared against the public ownership of railways, and even suggested that further aid should be given to certain railways under proper supervision so that their identity might be continued, the fact must not be forgotten that the construction of these railways was duly authorized by the people at large, and would not have been built without such endorsation. However, as the Government has been compelled to take over the Canadian Northern Railway, and to operate the Grand Trunk Pacific under a receivership, the experiment must proceed, and the Government is to be congratulated on the effort which is being made through legislation to keep the operation of these railways free from politics.

It may be necessary for the Government to take over the Grand Trunk Railway, but the extension of the principle of Government ownership to the Canadian Pacific Railway would prevent competition and, by overloading the Government, endanger the success of the whole undertaking.

Importance of Shipbuilding

If the work of the Canadian Trade Mission in London is to bear fruit, it must not be negatived by the shortage in ocean transportation. It is of the utmost importance that the shipbuilding programme of the Government should be hurried to completion, and that efforts be made to secure more ocean space. It will be most serious if the latter part of the summer and fall finds Canadian farmers unable to ship their wheat to Europe, and Canadian manufacturers unable to ship their goods, which have already been sold, on account of the lack of shipping facilities.

The result of the Ontario Insurance Investigation fully justified the attitude taken by this Association in regard to licensed insurance, as the Commissioner recommended that there should be on interference with unlicensed competition.

Canada still holds the unenviable position of having the greatest fire-waste per capita of any country in the world. As this Association's policy is to support any campaign or any

organization which is trying to reduce fire losses, we took the opportunity to attend and gave our support to the annual convention of the National Fire Protection Association of the United States, which was held last month in Ottawa.

Council has approved the policy of the Government in placing restrictions on immigration. We have enough problems on our hands now without encouraging the influx of Europeans who want to leave their own countries in order to escape the burden of war taxation. We should not encourage the immigration of those whose political and social beliefs unfit them for assimilation with Canadians. While a great country such as Canada, possessing millions of vacant acres, needs population, it is wiser to go slowly and secure the right sort of citizens.

Council has given a great deal of thought to the question of scientific research. There is no doubt that we have failed to attach proper importance to this subject in the past. Other countries are spending millions where we spend hundreds of dollars. Closely allied to the question of scientific research, is the question of providing adequate technical education and scientific training. For the next few years, Canadian educationists should concentrate on the task of providing greater facilities for industrial education, and also for agricultural education. Our whole educational system with few exceptions appears to be designed to supply the professions which are already overcrowded. Our sincere gratitude is due to the Government for its recent legislation in aid of research and technical education, and we believe that it will stimulate and strengthen the commercial fabric of the country.

A great many people think because the war is over that the watchwords "Work and Save" are no longer necessary. They are more necessary now than ever. While the war was on, we could not count expenses. In so great an emergency, money had to be spent lavishly. Now we have to pay the bill, and it can only be paid by the united efforts of the Canadian people, which means simply that we all must work harder than ever and save more than ever.

There is no easy path to success. Probably no other has more clearly defined elements of greatness. If all classes pull together, if they think less about themselves and more about their country, nothing can stop Canada; nothing can interfere with the fulfilment of her glorious destiny.

Adoption of the President's Annual Review

THE motion to adopt the President's annual review was moved by Mr. T. P. Howard, and seconded by Mr. Thomas Roden. Mr. Roden said:

"I think we are all impressed with the serious view that the President has given us of the problems before Canada. We have to work and save. Few of us are taking that seriously to heart. With such a tragedy as we have passed through, the greatest economy must be exercised to meet our obligations. Some of us had the opportunity of hearing Professor Maclennan the other night, in reciting to us his association with the Admiralty Board and the attitude of Great Britain in this emergency. Professor Maclennan stated the thing that burdened him most and the thing that seemed to burden the British Cabinet most, was the tremendous debt that fronts every country of the Empire. It is for us to help to direct public attention to the importance of our obligation and to encourage thrift and industry.

In Position of Advisers

"Frankly, I take the view that we are looked upon as advisors, in the sense that many of us have got past the stage where we check the details of our business, and are now acting in an advisory capacity. In that particular way I believe that our judgment should be one that should commend itself, not only to the business interests but to the whole community, because in many cases there are very great responsibilities devolving upon the men who are guiding Business. We have as you know to resist the importunities of men who are idealists and seeking the betterment of conditions without realizing the responsibility of their words or their recommendations, and as the President enunciated to-day, we have to face these responsibilities and we must have the courage of our convictions to stand up for what we consider our best judgment in dealing with these problems. We must not fear criticism if we are in opposition to those people who are idealizing for better conditions. We should not be intimidated into considering demands made upon us which will be inimical to the welfare and best interests of Canada. If we are misjudged, let us stand by our guns and determine that those things we are working for are worthy of standing by.

"We have been asked for lower working hours and increase of wages, which anyone who knows, knows that it means an increased cost of materials, and that will prejudice to a large extent our opportunities for export trade which we depend upon and which is so important to meet our debt charges and to keep away from Canada the tremendous importations that prevailed previous to the war.

Recognizing Responsibilities

"I think most men view with alarm the tremendous inroads that have been made, and I trust, gentlemen, that when we are asked to pass upon these matters, and when we are faced with industrial problems, we will have the courage to stand up, not with any spirit of antagonism but only a desire to recognize our responsibilities and to meet the situation in a way that will be a credit to ourselves. Lloyd George has stated in splendid words just what the situation was in Great Britain. In meeting a body of men, I think it was in Glasgow, he said, 'For generations we have been living and passing through a comfortable valley until the scourging hand of fate led upward to the peaks where we recognized the peak of honor, of industry, of patriotism, but more than all,' pointing his finger to heaven, 'that glorious peak of sacrifice, and we must not let these sacrifices be in vain.' Now, gentlemen, our men went forward and made tremendous sacrifices; they had the courage to meet the common enemy and die upholding the liberty and preservation of this glorious country, and I feel sometimes we are challenged as to our sincerity when we are trying to stem that tide of idealism which might mean the wrecking of our country. In that way we want to have courage and feel that whatever we do and say, not only with regard to labor but some of the abuses that have crept in to our general administration, both in business and in other ways, that we are doing our duty. We have a magnificent organization. We want to feel it is free from any cause for any of those insinuations that at times are made against us. But unless we are determined to be criticized ourselves, we cannot criticize others. Our president and our officers have given us splendid service in the past and we are proud of having such men at the head of our affairs."

The President put the motion to adopt the President's annual review, which on a vote having been taken, was carried with applause.

Insurance Committee Had an Active Year

Findings of the Ontario Insurance Commission are Discussed —Progress of Fire Prevention Movement Outlined—Desirability of Installation of Automatic Sprinkler Systems is Emphasized

Report Presented by
W. H. SHAPLEY
Chairman, 1918-19, Insurance Committee

SINCE the last Annual Meeting the Honorable Mr. Justice Masten, who was commissioned by the Ontario Government to make enquiries into the insurance laws of the Province of Ontario other than life and marine insurance, has made his report, and it is most gratifying to record that the findings of the report constitute an entire justification of the representations made by the Canadian Manfacturers Association before the Commission. When the Canadian insurance companies made an attempt to restrict competition by imposing an additional tax on fire insurance obtained abroad, this Association opposed the suggestion and arranged that evidence should be given by its members before the Commission.

The Commissioner finds that the Canadian Fire Underwriters' Association exercises practical control of fire insurance in Ontario, and that licensed independent companies are not sufficiently numerous to afford any adequate effect on rates. He states that the only real competition comes from insurance concerns not licensed in the province, such as London Lloyd's and the New England Mutuals. The Commissioner believes that nothing should be done to limit such competition, and suggests that inter-insurance exchanges in sufficiently good standing might be allowed to transact business in Ontario without making the deposit called for in the Ontario Insurance Act.

The Commissioner advises that the Provincial Government should be given power through legislation to exercise some control over the Canadian Fire Underwriters' Association and all similar rate-making organizations, and that the Superintendent of Insurance should be empowered to act as arbitrator between such organizations and the assured.

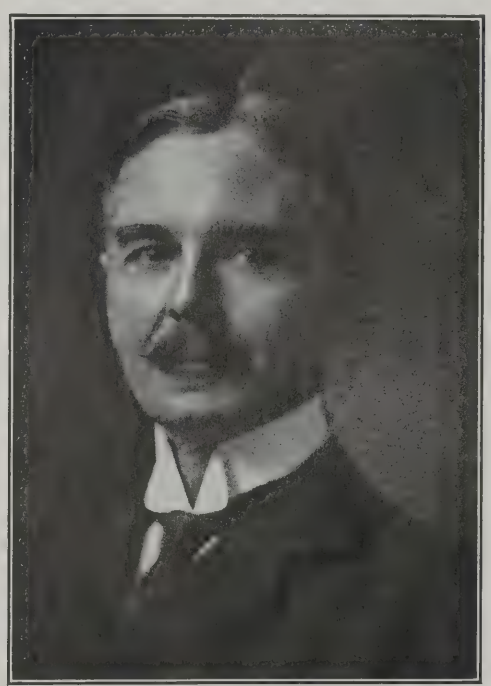
The Commissioner's Views

Actual rate-making by the Government is deprecated, as the insurance companies could refuse to transact business according to what they might consider inadequate rates. The Commissioner believes that State insurance is not feasible. He appears to think more highly of arbitration and conciliation than of undue Government control and interference. He also believes that in many cases the commissions paid to agents are too high. He points out examples where forty per cent. of a premium is alleged to have been paid as a commission, and favors a method of remunerating agents which will be based on the actual profit made by the agency or company. Before legislation covering the last point is enacted, he suggests that the companies consider the problem and agree upon some alternative, otherwise the Legislature should limit the amount of fees and commissions which may be paid or received on any application for insurance on property in Ontario.

The Commissioner, apparently thinking that too many people write insurance as a side line to their chief occupation, suggests that licenses should only be given to persons or firms dependent upon the business of insurance for a living.

The Commissioner advocates greater attention to the problem of reducing fire waste, as no substantial reduction of rates can be made without a corresponding reduction in fire losses. All who cause fires through carelessness or omission of duty should be made amenable to the criminal law. He advises the Government to employ experts, whose duty would be not only to inspect risks, but to educate property owners in fire prevention matters. He would compel insurance companies to keep their records so as to classify the business done, and to show the profits made in the various classes or risks.

The Commissioner recommends that the Insurance Department make a real examination of every applicant for a license as agent, broker or adjuster, the power to refuse or cancel such licenses to be vested in the Superintendent of Insurance, subject to the right of appeal to a judge. He would increase the annual fees paid by agents to a minimum of $5.00, graded to a maximum of $100.00. He also advocates the appointment of business men and experts to confer with the Fire Marshal in making recommendations.



H. W. FLEURY
J. Fleury's Sons, Aurora
Chairman 1919-20, Insurance Committee

There is one suggestion made by the Commissioner in the following paragraph which your Committee could not approve.

"It appears to me that there should be a specific application in every case made to the Department and passed upon by it, and that the application should be refused unless the broker who is applying can satisfy the Department—first, that the insurance required cannot be obtained with registered companies at ordinary or reasonable rates; and second, that the company in which it is proposed to place the insurance is solvent."

Such an arrangement might readily meet with the approval of the insurance companies, and might find its way into legislative enactments unless developments are carefully watched. In practical effect such a claim would be a most effective means of check-

ing the competition of licensed insurance, whereas the Commissioner advises that such competition should be encouraged. Your Committee, therefore, instructed Council to communicate to the Commissioner and the provincial authorities our opinion that the proposal will be regarded by manufacturers with serious apprehension.

Your Committee believe that, with this exception, the Commissioner has made a most valuable report, and that his recommendations should do much to provide safer, cheaper and more satisfactory insurance to manufacturers. Your Committee take pleasure in expressing their complete confidence in the Hon. Justice Masten, believing that he has taken an unbiassed view of the subject and that the majority of his conclusions cannot be assailed.

Fire Prevention

As yet we have no official system of compiling statistics in regard to fire losses, and information available is, therefore, incomplete; but the *Monetary Times*, which has made a careful study of the question for years, estimates that in 1918 fire cost Canada 241 lives and about $32,000,000. This estimate does *not* include the lives and property destroyed by forest fires. So far as statistics are available, Canada leads the world in fire losses. Before the war the average annual fire loss of five of the leading countries of Europe was 33c. per capita per year. The fire loss of the United States per capita is about $3 per year. According to the estimate of the *Monetary Times* the annual fire loss in Canada is about $4 per capita. The loss of life incidental to fires is, of course, more deplorable than the loss of money; but to permit the annual destruction of $32,000,000 worth of property, exclusive of that destroyed in forest fires, in a period of high taxation, is a criminal example of national negligence. After giving considerable attention to this subject for a number of years, your Committee are convinced that, notwithstanding the efforts of the insurance companies, underwriters' associations and other bodies, this negligence is increasing rather than diminishing.

The report of the Ontario Fire Marshal shows how much manufacturers are to blame for fire losses. During 1918 the factories burned in Ontario numbered 486, involving a loss of $7,565,000, or one-half the total fire loss of the province.

Farmers also have shown negligence. In the same year 1,223 unrodded buildings were destroyed by lightning, while only two buildings fitted with lightning rods were burned. The great majority of these buildings belonged to farmers. The man whose property is destroyed by fire is only partly compensated; the people who are taxed to furnish the compensation are not repaid; the lives lost cannot be restored, and the property destroyed cannot be replaced. Every fire reduces the national wealth.

Should Have a Commission

This criminal waste will continue until we as citizens and as manufacturers take hold of it with a determination to reduce it and urge the Government to immediate action. The great mass of citizens, including the members of this Association, should not be taxed for these millions of dollars each year without a protest. In these days, when the appeal is being made to produce and save, both absolutely necessary if we expect to recover our position, we are certainly not assuming our responsibility unless we put forth a much greater effort to remedy this glaring evil.

Your Committee believe that the Government should appoint a commission to investigate the reasons underlying the fact that the fire loss of Canada is greater than that of any other country, and to suggest measures for its reduction.

Fire marshals should be appointed in every province, and fire prevention associations should be organized in every city, town, village and county. These associations should study local conditions and suggest remedies. A National Convention should be held annually to discuss fire prevention, and a constant campaign should be maintained. The practical results cannot be secured until the majority of the people are roused to the seriousness of the situation. We urge the members of the Association to interest themselves in forming fire prevention associations in their own towns, so that this matter may receive the attention it deserves. In this way we believe the fire loss can be reduced by each locality looking after its own conditions.

During the past year the Dominion Government invited representatives from a number of important interests to meet the Superintendent of Insurance at Ottawa, and as a result the Dominion Fire Prevention Association was formed. The Dominion Government has appointed a Fire Commissioner, who is giving his time to prevention work exclusively. Your Committee supported the creation of this association, on which we have now four representatives, including the Chairman of your Committee, who is also Chairman of the Dominion Fire Prevention Association. This Association, by acting in an advisory capacity and in co-operation with the Dominion Superintendent of Insurance, assists in co-ordinating the views and putting into practical effect the suggestions of those who try to reduce our national fire losses. Your Committee has tried to maintain the policy of this Association of steadily initiating and supporting all measures which are designed to fight fire, keeping in mind the principle that diligence should be rewarded, and that negligence should not escape the consequences of its acts. In this connection we would like to record our gratitude for the splendid assistance of the Press in publishing editorials, articles and statistics advocating the reduction of fire waste.

Amendments to the Code

The Executive Council of the Association approved of the following amendments to the Criminal Code which were drafted by the Dominion Fire Prevention Association, and which have been passed by both Houses of Parliament at the present session:

(1) Section 515 of The Criminal Code is amended by inserting the following subsection immediately before subsection 2 thereof:

(1A) Everyone is guilty of an indictable offence and liable to two years' imprisonment who by negligence causes any fire which occasions loss of life or loss of property.

The person owning, occupying, or controlling the premises in which such a fire occurs, or on which such fire originates, shall be deemed to have caused the fire through negligence if such person has failed to obey the requirements of any law intended to prevent fires or which requires apparatus for the extinguishment of fires, or to facilitate the escape of persons in the event of fire, if the jury finds that such fire, or the loss of life, or the whole or any substantial portion of the loss of property, would not have occurred if such law had been complied with.

(2) The said Act is further amended by inserting immediately after section 515 the following section:

515A. When any Dominion, Provincial or Municipal fire officer or authority recommends to the owner, lessee, or other person controlling or operating any building, structure, factory, shipyard, vessel, dock, wharf, pier, sawmill, or yard in which logs or lumber are stored or held, that any reasonable change, alteration or addition should be made in or to such building, structure, factory, shipyard, vessel, dock, wharf, pier, sawmill, or yard, with a view to safeguarding life or property from destruction by fire, or that any material should be removed therefrom with such view, or that any apparatus should be supplied therefor with such view; and if such recommendation is approved by an officer in the service of His Majesty, thereto authorized by the Governor in Council; and if notice of such recommendation and approval has been personally served upon such owner, lessee or other person; and if, after the expiration of thirty days from the receipt of such notice, such owner, lessee or other person refuses, neglects, or otherwise fails to carry out such recommendation to the satisfaction of the officer in the service of His Majesty hereinbefore mentioned, such owner, lessee, or other person shall be guilty of an indictable offence and shall be liable to a fine of not exceeding one thousand dollars, or to imprisonment for any term not exceeding six months, or to both such fine and imprisonment.

The members of your Committee represented the Association at the General Conference on Fire Prevention, which was held in

Ottawa on December 13th, 1918. The following organizations were also represented:

Canadian Fire Underwriters' Association.
Non-Tariff Insurance Companies.
Canadian Credit Men's Trust Association.
Retail Merchants' Association.
United Farmers of Ontario.
United Farmers of Alberta.
Wholesale Grocers' Association.
Canadian Bankers' Association.
Dominion Mortgage and Investment Association.
Fire Chiefs' Association.
Commission on Conservation.
Department of Insurance.

Automatic Sprinklers

As statistics compiled by the Commission of Conservation show that 65 per cent. of the fire loss in Canada has been caused by 3 per cent. of the fires, your Committee felt that steps should be taken to compel the installation of automatic sprinklers in certain classes of buildings. Consequently, your Committee submitted to the Executive Council a copy of the following resolution which had been passed at the General Conference on Fire Prevention in Ottawa in December last:

Therefore be it resolved that this Committee recommend that a law be passed making it compulsory that a complete system of automatic sprinklers be installed in every building not of fire resistive construction and not having fire-proof floors:

(*a*) When the building contains machinery and (or) stock valued at over $200,00; or

(*b*) When the building has a ground floor area over 20,000 square feet if one story high; or over 15,000 square feet if two stories high; or over 10,000 square feet if three or four stories high, or if more than four stories high; or

(*c*) When the building is used as a factory premises and having over 100 employees, and that such a system be required to be installed in the basement only of warehouses and factories having a stock and (or) machinery valued at less than $200,000, but more than $50,000.

Council, owing to the suggestion that such installation be made compulsory, referred the resolution back for further consideration. At the next meeting of Council your Committee reported as follows on this subject: "After full consideration the unanimous sense of the Committee was that any recommendation for sprinkler equipment must be considered in the light of the sources of the supply of the equipment, and that it was essential to have some control over the sources of the product before compulsory legislation would be practicable." This report was acceptable to Council.

Your Committee believes that the installation of automatic sprinklers will have more effect than any other measure to reduce the loss of life and property through fire.

Written Application for Insurance

The Dominion Superintendent of Insurance considered a proposal to amend the Dominion Insurance Act so as to require that a written application, signed by the assured, must be supplied to every fire insurance company issuing a policy, and providing that unless this application is filed with the company within fourteen days after the inception of the insurance, the insurance will be considered void. Your Committee, in view of the hardship which such an amendment would impose on manufacturers holding large numbers of insurance policies, opposed the amendment, and have been informed that the Superintendent of Insurance, who has received other protests, will not take action until the objections raised are reconciled.

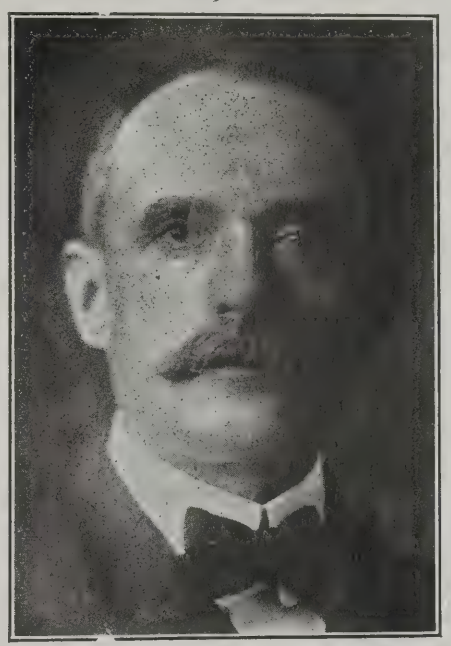
Your Committee represented the Association at a gathering held at the Parliament Buildings, Toronto, on August 30th, 1918, for the purpose of forming the Ontario Fire Prevention League, in affiliation with the Ontario Fire Marshal's Department. This conference approved of the following recommendations:

The adoption by municipalities of a standard building code, so that fire resistive building construction may be encouraged, the use of inflammable roof coverings prohibited, adequate exit facilities from buildings secured, and interiors so designed and fire-stopped as to make easy extinguishment of fires therein.

The adoption by the provinces of a minimum building code for the protection of hospitals, schools, asylums and similar institutions outside the city limits, and in small communities in which the establishment and enforcement of a building code is impracticable.

The adoption by municipalities of the "Suggested By-Laws," published by the Fire Marshal's office, providing for the systematic inspection of all buildings, for cleanliness, the removal of rubbish, the maintenance of proper exits, fire-fighting apparatus and other protective devices.

Application of the principle of common law of personal liability where a fire originates in the premises occupied by any person as a result of his criminal intent, design or wilful negligence.



B. and C. Press photo

W. H. SHAPLEY
Sterling Actions & Keys, Toronto
Retiring Chairman, Insurance Committee

Wider general use of automatic sprinkler and the more general adoption of the fire division wall.

Careful study of water supplies, fire department efficiency and possibility of co-operation among neighboring cities and towns.

Universal adoption of the safety match, and legislation prohibiting smoking in all parts of factories, industrial and mercantile buildings.

Regulation of transportation, storage and use of inflammable liquids and explosives.

Education of the public in careful habits regarding the use of fire, and prohibition of fireworks except by special license.

Statutory obligation upon every municipality to equip and maintain a fire brigade and provide a water supply.

Equipment of barns containing farm produce with standing lightning rods.

Inspection of all electric wiring throughout the province.

The work accomplished by the Ontario Fire Prevention League has been valuable, and your Committee takes pleasure in endorsing it and in recommending that similar leagues be formed in other provinces.

Representatives from your Committee attended the convention of the National Fire Protection Association, which was held in

Ottawa, on May 6th, 7th and 8th of this year. As this Association contains within its membership most of the chief organizations in the United States, besides thousands of individuals, it was most gratifying that it was induced to come to Canada this year. The Chairman of your Committee was appointed a delegate to attend this convention and to read the report of the work done in regard to fire prevention during the past year by this Association, which is also a member of the National Fire Protection Association.

Insurance Department Service

Your Committee point out that the services which our Insurance Department can give to members in any part of Canada include the examination of policies, suggestions as to contracts, confidential reports regarding insurance companies, and general advice and information on insurance matters.

During the past twelve months, according to the records of the Insurance Department, special service has been rendered to members of the Association on 294 occasions, and in that period the Department has been consulted by about 190 members. The subjects on which the Department has been consulted and the number of enquiries on each subject are as follows:

Examination of policies and policy wordings ..	69
Rates	60
Automatic sprinkler equipment	32
Standing of companies	30
Inspection of service	34
Insurance values	30
Construction advice	10
Boiler inspection law	22
Claim collections and adjustments	5
General	2

Industrial Group Life Insurance

At the request of a number of our members the question of Industrial Group Life Insurance was considered. Insurance companies are inclined to take the ground that this type of insurance cannot be transacted profitably under the present Canadian laws. Your Committee is carrying out instructions given by Council to ask the Government to facilitate the transaction of Industrial Group Life Insurance, but no action has resulted up to the present time.

Increase in Insurance Values

The Insurance Department, in two circulars issued in October and December respectively, drew the attention of members to the great increase in the value of property, and the consequent necessity for increasing the amount of insurance carried on such property, in order that owners might be adequately protected in case of fire. As a result of these circulars a great many members had their properties valued and their insurance increased.

All of which is respectfully submitted.

W. H. SHAPLEY, *Chairman.*
J. T. STIRRETT, *General Secretary.*
J. E. WALSH, *General Manager.*

Adoption of Report

At the conclusion of the report Mr. Shapley said: "Mr. Chairman, I have much pleasure in moving the adoption of this report. We have just heard from Mr. Roden and we have also heard recently from our Finance Minister, that the watchword of this country during the next few years must be production and saving, and why we, as citizens of this country, allow this criminal waste to go on from year to year without doing more than we are doing at the present time to prevent it, is something that I, as one of the Committee, cannot understand.

"We have heard a good deal about the quality of the men we have at the head of our Association. It is not necessary for me to repeat anything that has been mentioned this this morning, but I think it is time that our members volunteered to assist us in some of the work we are trying to carry on. I have had the honor and pleasure of being Chairman of this Insurance Committee for two years, possibly longer, and I can assure you the work is important. It is a serious situation and I know that perhaps there are men who would be quite ready to assist us in this work, but for some reason or other they are not made known to us. I think the time has come now when these men should lay aside any modesty they may have in that direction and offer themselves to the Committee on Insurance. Perhaps other committees would be glad to have their assistance as well, but I am speaking for the Insurance Committee at the present time. I would be very glad to receive the names of any persons that will volunteer their services in that way."

Administration of Fire Departments

MR. THOMAS RODEN: "As a member of the Committee I would like to second that particular report and to make one remark, and that is on the question of the better administration of the fire department. We have in the City of Toronto memorialized the Council or Board of Control to make promotions by examination and by merit. That might be done in every city, and it will have an influence perhaps on the type and character of the men who are at the head of the fire departments.

"Another feature which we have emphasized, sometimes locally and sometimes generally, is that factories should be inspected by the branch fire department, and in our own locality down east we took that matter up with the fire department, and every two months the Chief brought a certain number of men to the factories in our district and examined the condition of the factories, and he went so far as to ask for plans of the factory so that the men would become acquainted with the interior conditions and make greater progress in case a fire occurred. That is a measure of prevention and also helps to eliminate a certain amount of loss.

Sprinkler System in Factories

"One point he made, which we had under discussion, was the question of imposing upon certain factories the onus of installing fire equipment. That might seem an interference with our liberty of action, but anything that will try to encourage men to consider this feature of it is worthy of consideration. Your Committee are suggesting this for the purpose of asking you to consider the advisability of putting into operation the sprinkler system in large factories and in that way to eliminate a large amount of waste. I have much pleasure in seconding the motion."

MR. LEES (Hamilton): "With reference to page 10 of the report, may I ask a question as to these services. They are not all rendered free?"

MR. SHAPLEY: "Nearly altogether free."

MR. LEES: "Any member is entitled to the services free?"

MR. SHAPLEY: "Yes."

The President put the motion to adopt the report of the Committee, which on a vote having been taken was declared carried.

Legislation Committee Reports for the Year

Much Attention Paid to the Subject of Company Licensing and Registration — Progress of the Dominion Bankruptcy Bill — Workmen's Compensation Legislation in the Several Provinces — Insurance Investigation

Report Presented by
SAM HARRIS
Chairman, Legislation Committee, C.M.A.



SAM HARRIS
Harris Litho. Co., Toronto
Re-Elected Chairman, 1919-1920
Legislation Committee

THE work of your Legislation Committee during the past year has consisted largely in dealing with important questions which have been before the Association for several years past, and in carrying out policies previously determined.

Incidental to important changes in organization and service, your Committee, after full consultation with the Executive Committee, resolved to re-organize the Legal Department, under which arrangement all correspondence with members of the Association, Government Departments and others will be conducted through the head office alone. The function of the Legislation Committee is to give attention to all legislation, federal and provincial, affecting the interests of Canadian manufacturers and to arrange for the appointment of a sub-committee in each of the provinces, whose duty it is to keep the Central Committee fully advised, and to work in harmony with it.

In view of the increasing volume of correspondence on legal and technical matters, the Executive Committee, upon a report by your Legislation Committee, has accordingly reorganized the Legal Department, and all correspondence and enquiries that should properly come before this Department should be addressed to Mr. H. Macdonald, Secretary Legal Department, who will have the assistance of special counsel as required.

Company Licensing Cases

The actions brought at the instance of the Association to test the validity of the Company Registration and Licensing Acts of Saskatchewan and Manitoba as against Dominion Companies, have been decided by the Supreme Court of Canada in favor of the provinces. Judgment was handed down last month after a delay of over a year, during which the cases were re-argued at the request of the Court. The judgments are somewhat meagre, having in view the importance of the issues. This may be because of the feeling, expressed by the Court both on the argument and in some of the judgments, that the cases should have been appealed direct to the Judicial Committee of the Privy Council. Mr. Justice Iddington made some caustic comment on the fact that private parties should have attempted to secure a decision on the Acts when the Dominion Government had failed in its efforts to this end.

Two of the five judges dissented in the Manitoba case. In the Saskatchewan case the Court was unanimous. The Saskatchewan Act, it will be remembered, required all companies, including Dominion companies, to register under the Act before carrying on business in the province. When registered, a company becomes subject to all the provisions of the local Companies Act, including such matters as the holding of meetings, election of directors, etc. The judgment shows a disposition to go the full length of the provincial contentions. No exception is made, as in the decision of the Appellate Division in Ontario, of the provisions which incapacitate a Dominion company from maintaining actions in the courts.

Provincial Decisions

The decisions in the Saskatchewan and Manitoba cases would doubtless govern in the case of the Acts of Ontario, British Columbia, New Brunswick and Nova Scotia, which require Dominion companies to become licensed before carrying on business in the province. The Acts of Quebec and Alberta at present expressly except Dominion companies. If all the provinces were to legislate to the extent of their jurisdiction as laid down by the Supreme Court decision, a Dominion company would be practically an outlaw from the moment of its birth, and would depend for its corporate rights in each province upon the provincial company laws. As the provincial licensing fees are uniformly on the same scale as the fees for provincial charters a Dominion charter would be of no practical use and would merely involve one additional incorporation fee. A provincial charter would have the advantage of giving a company the right to carry on business in at least one province.

It may be of some interest to illustrate, from the standpoint of fees, the difference between a Dominion charter on the one hand and a Provincial charter, with extra-provincial licenses on the other. Take, for instance, a company with a capital of $100,000. For a fee of $150 such a company could be incorporated under Dominion charter with the right to carry on business throughout the whole of Canada. The fee for an Ontario charter for the same amount of capital would be $160, with an annual fee of $5, but before the company could do business in any of the other provinces, licenses would have to be taken out in these other provinces and fees paid as follows: Quebec, $100; New Brunswick, $50 per annum; Nova Scotia, $10 per annum; Manitoba, $100, and $5 per annum; Saskatchewan, $120, and $40 per annum; Alberta, $75, and $5 per annum; British Columbia, $77.50; Yukon Territory, $300; making a total initial fee of $927.50, with annual fees of $115 for the privilege of doing business throughout the whole of Canada, as against an initial fee of $150 under the Dominion Act for the same privilege, with an annual fee of $5.

The decision appears to your Committee to be contrary to the principle laid down by the Privy Council in the John

Deere Plow Company case that a federally incorporated company had the right to carry on business throughout the whole of Canada, and it was worth noting that at least two of the provinces had taken the same view by exempting Dominion companies from their Acts. Though there has been great difference of view amongst the provincial authorities, none of the provinces has attempted to enact legislation so far-reaching as would be justified by the combined effect of the two decisions.

It has been suggested that the only effect of a decision against the provinces in these cases would be to call forth greater ingenuity on the part of the provinces in framing legislation which would effect the same purpose. This suggestion is based on a mistaken notion that the question is as to the power of a province to tax a Dominion company. The question is not as to the power of a province to tax. It is as to the power of a province to make the corporate status and powers of a company dependent upon compliance with the provisions of the local Companies Acts, including incidentally the payment of incorporation fees. The practical difficulty under a system of provincial licenses is that of determining what precise state of circumstances will constitute a breach of the provincial Act. A company with its head office at Toronto, shipping a bill of goods to Winnipeg, is in doubt as to what circumstances will bring it within the terms of the Manitoba Licensing Act in order to prevent the company from enforcing payment of the goods. The only way for the seller to make absolutely sure of his right would be to take out a license in every province to which he expects to ship goods, for in one case the mere delivery of goods in the province was held to constitute carrying on business in the province. It would mean that until a license was taken out goods could not be safely shipped, except c.o.d. Such a condition of things is inimical to sound business relations. The provincial scheme, if successful, would go a long way toward neutralizing the effect of Confederation in unifying the different provinces for commercial purposes. It is safe to say that under no other federal system would such a condition be tolerated. In the United States, by way of comparison, it has been held that even those companies which are incorporated under state charters are immune from this class of legislation so far as interstate business is concerned.

Meanwhile members have been circularized to the effect that if any Dominion incorporated company is called upon to comply with the Provincial Acts, they should do so under protest, pending the result of a probable appeal.

Bankruptcy Bill

Your Committee have followed with interest the course of this Bill, which, at the time of writing, has been reported by the Committee of the Whole of the House of Commons. The Bill, as it came from the Committee of the House at the last session, has been largely amended and redrafted, and many of its defects have been removed. Following the policy outlined in the report to the last annual meeting, your Committee made representations to the Government, asking that the courts for administration of the Act should be Federal Courts under some system of central control or supervision, instead of, as proposed by the Bill, provincial courts under provincial control. The chief objection to this proposal was that the creation of additional courts would involve expense which Parliament would be reluctant to authorize. Against this it was pointed out that if additional machinery and additional work were necessary under a system of provincial administration, it would equally involve additional expense. Several conferences were held with representatives of the Canadian Credit Men's Association and the Toronto Board of Trade, who urged that the Bill be adopted in its present form. It was finally decided to defer to the views of these bodies as a matter of expediency, while urging upon the Government, however, that if the system of administration suggested was not adopted, some other plan should be devised which would insure a proper control of the trustee and an accounting by him for the proceeds passing through his hands. At the time of writing this report, such provision had not been made.

Workmen's Compensation

The views expressed by the Association some years ago, when the drafting of the Workmen's Compensation Act for Ontario was in progress, are finding their justification in developments in the different provinces from year to year. It will be remembered that a special committee of the Association, representing all the provinces, laid down a general plan and drafted a bill as a model. In the degree to which the model bill of the Association was embodied in the provincial Act, it is already possible to say that the Acts in the different provinces have proven successful in their operation, not only to employers but to workmen themselves. The Act of Nova Scotia, which followed largely the Association's draft, has proven on the whole a very satisfactory measure. The Act in New Brunswick, which followed the Association's draft still more closely, with certain amendments suggested by experience in the other provinces, gives promise, with a few exceptions, of being the most satisfactory of any of the Acts now in force.

The British Columbia Act is based largely on the Nova Scotia Act, but there is one feature in which it is superior, namely, the provisions for medical aid. Adopting a scheme which has been operated in several states in the United States, the medical aid in British Columbia has been paid out of a separate fund, to which both employers and workmen contribute. This has had the effect of invoking the interest of the workmen themselves in preventing malingering and fraud upon the funds. It is to be noted that the Province of Ontario, by the amendments of the past session, has thrown the door more widely open in the matter of medical aid, which no other jurisdiction in America has dared to do. When it is remembered that the majority of industrial accidents is due not to any fault on the part of the employer but to the fault of the workmen themselves, it is patent that there is no justification for charging upon employers the whole cost of medical aid to workmen. The whole subject of pensions and medical aid to injured workmen is one which will probably demand the most careful attention of employers for some time to come. The tendency to load upon employers of labor the burden of providing for pensions of one kind or another is one that must sooner or later, if given way to, lead to disastrous consequences.

The view of the special committee of some years ago on the subject of private liability insurance has also been justified by the experience under the Manitoba Act. On the passing of the Manitoba Act the employers prevailed upon the Government to adopt a scheme of private liability insurance under provincial control instead of the scheme of group insurance which prevails in Ontario, Nova Scotia, New Brunswick, Alberta and British Columbia. The inevitable result has followed that the liability insurance companies have been compelled to raise their rates above the level of the rates of those provinces where the insurance is under Government administration. The claims of some of the administering Boards that their funds have been administered on an expense ratio of between three per cent. and four per cent. may be somewhat overdrawn, but there can be no question that, other things being equal, no system of private insurance can compete, in the

matter of economy of administration, with a system of private insurance under which the ordinary expense ratio ranges between 40 per cent. and 55 per cent.

This is not saying that it has been proven that a State-administered system is entirely satisfactory. Numerous illustrations are already available, as every employer knows, of the dangers of fraud and abuse under the State systems now in operation. It is to be feared that during the strenuous period of the last few years not sufficient attention has been given by employers to the problems which the Workmen's Compensation Acts present. It is not unlikely that a harvest of these problems will presently demand attention.

Situation in Ontario

Your Committee is not able to report any improvement in the condition of things in Ontario, which was brought to the attention of the annual meeting in the report last year, namely, the lack of co-ordination between the Workmen's Compensation Board on one hand and employers on the other, in the matter of accident prevention. The Board has, in the meantime, set up a system of merit rating based more or less arbitrarily on the results for the year. Your Committee hope that this may eventually lead to a satisfactory merit rating being evolved.

Your Committee feel that the existing relations as between employers and the Board cannot be regarded as satisfactory, but it will probably remain for employers to make proper use of their present powers under the Act in order to effect a remedy. Efforts were made by your Committee during the last session of the Legislature to secure amendments, as follows:

1. That the right of "Safety" Associations to represent their respective groups of employers before the Board be recognized.
2. That a duly appointed representative of each group of employers shall have access to the accounts of the group funds.
3. That facilities be provided for an appeal to an adequate tribunal on points of law.

A deputation of your Committee had a number of interviews with the Government, but none of the amendments asked for were granted. Your Committee report the facts without further comment.

Amendments Brought In

Amendments were brought in and passed removing the limitation of medical aid to one month, and enabling the Board to pay medical aid for an indefinite period and to an indefinite amount. The minimum monthly payments under the Act were raised from $20.00 to $30.00. Employers were placed under an obligation to provide immediate transportation of an injured workman to a hospital or to a physician or to the workmen's home. With respect to alien enemies, it has been provided in amendment that no resident of an enemy country or of a country voluntarily withdrawn from alliance with the British Empire during the Great War, or of a country in default of establishing peaceful and harmonious relations with the British Empire, shall be entitled to compensation under this Act. None of these amendments were opposed by your Committee.

A provision has also been introduced giving the principal employer right to reimbursement from a contractor or sub-contractor, for payment of assessment or compensation or medical aid furnished, to such extent as the Board finds such contractor or sub-contractor would have been liable.

The exception from the Act of persons engaged in clerical work and not exposed to hazards of the business was removed, thus bringing clerical employees within the operation of the Act. Your Committee opposed this amendment on the ground that such employees are not liable to the hazard.

The New Brunswick Act has gone into operation with every promise of success, subject to the difficulty that the constituency covered is not large enough to afford safe averages, except in a very few groups. This will mean difficulty in making proper rates, and may induce some of the employers to look for re-insurance or insurance outside of the Act. The Act has been extended by Order-in-Council, to cover the woods and river operations of lumbermen.

In Manitoba the employers were met, as already indicated, with a demand for an increase of approximately 86 per cent. in the rates charged by the liability insurance companies. The Workmen's Compensation Board allowed increases averaging about 30 per cent. on the understanding that the new rates would be subject to revision after one year.

The Manitoba Act contains the same provisions as the Act of Ontario expressly prohibiting appeals from the decision of the Workmen's Compensation Board to the Courts. By a recent decision of the Court of Appeal for Manitoba it has been held that the rule prohibiting appeals is effective only where the Workmen's Compensation Board acts within its jurisdiction and according to law. In that case it was held that, having awarded a pension capitalized at some $6,000 against an employer without giving the employer an opportunity for a hearing, the award could not stand. A similar rule would doubtless be operative in Ontario.

Other Amendments

The British Columbia Act was amended at the last session by provisions enabling the Board to reduce the scale of pensions in cases where the dependents live in a foreign country where the scale of living is lower than that in British Columbia.

A recent case in the Supreme Court of British Columbia has laid down the principle, which would be equally applicable to other provinces, that the jurisdiction of the Workmen's Compensation Board to pay compensation is determined by the place where the accident happened. In other words, the Workmen's Compensation Boards would have no right to order payment of compensation for injuries received outside the provinces.

The Nova Scotia Act was amended at the last session by making provision for medical aid for a period of thirty days. In addition to this a large number of minor amendments was made. The amending Act was discussed at a conference between the employers and members of the Government. The employers were also desirous of having certain amendments made, but owing to the present condition of industrial unrest it was thought inopportune to press these upon the Government at the present time.

An Accident Prevention Association has been formed covering all the groups of employers under the Nova Scotia Act and providing for sections or departments for the different groups. This step has been taken in complete accord with the Workmen's Compensation Board, and there is every promise of effective work being done in the coming year.

Insurance Investigation

The report of the Hon. Mr. Justice Masten, who had been commissioned by the Ontario Government to investigate laws and conditions relating to fire insurance and other classes of insurance, other than life insurance, was tabled in the Ontario Legislature at the close of the last session, and is to be considered by a Special Committee of the Legislature before the opening of the next session. This committee will have charge

of the new legislation intended to embody the findings of the Commissioner.

The services of the Association's counsel were furnished throughout the investigation, and it is satisfactory to report that the Commissioner's findings sustained the representations of the Canadian Manufacturers' Association on every important point.

The Commissioner makes various suggestions for the improvement of the law with a view to inducing greater care in the prevention of fires, and points to the fact, which is now becoming common knowledge, that the fire rate of Canada, compared with other countries, is abnormally high. The Commissioner's report is more fully dealt with in the report of the Insurance Committee.

Further, it should be remarked that by an amendment to the Criminal Code, passed by the Dominion Parliament at the present session, negligence causing fire which results in loss of life and property, as well as refusing to make alterations, remove materials or supply apparatus when ordered by proper authority, shall be deemed an indictable offence.

Uniformity of Commercial Law

Your Secretary has been for a considerable period in communication with the Canadian Bar Association with a view to securing standardization of commercial laws throughout the various provinces of the Dominion. On the initiative of the Canadian Bar Association, a Commission consisting of representatives of the Governments of the various provinces, has begun the work of analyzing certain branches of commercial law, with a view to drafting statutes for uniform adoption.

It is proposed to keep in touch with the work of this Commission, and it is possible that practical suggestions may be made from time to time which will not only be of assistance to the Commission, but of special benefit to the Canadian Manufacturers' Association. Ontario, British Columbia, Manitoba, New Brunswick and Prince Edward Island have appointed Commissions and the rest of the provinces are expected to follow suit.

Union Labels

Your Committee gave consideration to the terms of a proposed Act to amend the Trade Mark and Design Act, providing for the registration of union labels, and declined to give their endorsement. The Committee agreed that if labor unions decided to hold property and to traffic in property, it was only right that they should assume the same responsibility as other property holders and make themselves liable to the same processes of law as those to which other property holders are liable. The fact that there is precedent for the registering of union labels in the name of unincorporated unions in the legislation of other countries, particularly in the legislation of the various states in the United States, is no reason why Canada should pass such objectionable laws.

Miscellaneous

The above comprise some of the important matters dealt with by your Committee. A large number of matters of lesser importance have been the subject of consideration and action.

All the Parliamentary bills, federal and provincial, were examined by the Department over which your Committee preside, some of the measures forming the subject of review by our Secretary in INDUSTRIAL CANADA, as well as being the occasion of extensive correspondence with members.

In addition to keeping in touch with legislature activities throughout the Dominion, and endeavoring to protect the interests of the manufacturers, your Legal Department has experienced a year of increased activity in advising members in the special branches of commercial law, to which it has been devoted.

All of which is respectfully submitted.

SAM HARRIS, *Chairman.* H. MACDONALD, *Secretary.*

J. E. WALSH, *General Manager.*

Discussion on Legislation Committee's Report

AFTER reading the report, Mr. Harris moved its adoption, seconded by Mr. Shapley.

A somewhat lengthy discussion on various matters brought up in the report was indulged in by the members, of which the following is a verbatim account:

MR. SHAW (Woodstock): "Mr. President, I think that the Legislative Committee is to be congratulated upon the report that has been presented to the Association. I am strongly of the opinion that the importance of the clauses dealing with interprovincial licenses is such that this Association should deal very vigorously with them. There is no question but that under our constitution the Dominion Parliament has power over trade and commerce, and naturally one would think if a group of men obtained a charter from the Dominion Government, they would have the right to trade within the boundaries of the Dominion of Canada without restriction from the different provinces. Such, however, is unhappily not the case. We find ourselves hampered in every way by the action of the provincial legislatures. Now, there is a reason for that, and I think the reason is entirely one of fees. The various legislatures are always looking for means of raising revenue, and considerable revenues have been raised by the provinces issuing provincial charters. They get at those who take out Dominion charters by passing legislation requiring them to pay a license and other fees for doing business in these provinces.

"The provinces in the west, which are the greatest sinners in this regard, are the ones advocating free trade, and putting up all sorts of legislative restrictions and enhancing the cost of doing business, the cost of goods, by every means in their power simply to raise a little revenue from license fees. There was only one argument put forward at Ottawa before the Supreme Court that seemed to me to have real weight, and that was that an enquirer, in regard to the financial standing and *bona fides* of an incorporated company, could not make the necessary search at Ottawa and he ought to be able to get the information quickly at his provincial capital, and that was one of the reasons why the provinces took upon themselves the power to compel Dominion companies to apply for license and deposit the information at the provincial capital.

"What was their reason, what was their object, what could be their game? At the bottom of it all is the question of fees. If the provinces could get the same fees that they have derived in the past from licenses from provincial companies, I think they would be satisfied, and I don't see any insuperable difficulty in the way of inducing the Dominion

Government to enter into negotiations with the provinces whereby the fees that are paid to the Dominion Government for charters shall be consolidated and distributed amongst the provinces, if it is money they want. At all events the provinces are subsidized by the Dominion Government, each of them get so many hundred thousand dollars a year according to population. They could reckon up the revenue they have derived from these sources during a series of years past and that could be added to the subsidy that is given, instead of compelling the provinces for financial reasons to pass acts that harass and increase the cost of doing business throughout the whole of the Dominion of Canada. It is a mere matter of the provincial secretaries of the various provinces and the Attorney-General of the Dominion getting together and settling this question.

Should be Prosecuted

"We went before the Supreme Court because they wouldn't get together, and we had to have a stated case and bring it before the Supreme Court with an endeavor to get a decision. There are some members of the Association that believe possibly the Association's funds should not be spent in prosecuting this question any further, and we should not go to the Privy Council. Well, I am one of those who think we should prosecute it further unless we can get the provincial and Dominion authorities to collaborate together and solve the difficulties themselves.

"I don't know that I have anything more to say on that point, Mr. President, unless it would be to give notice that I would move a resolution that before the convention ends, that the Dominion Parliament and provincial legislatures be memorialized to get together and solve this difficulty of interprovincial trade. It is true, as Judge Iddington said, that even in the small country town a peddler can't go in and peddle goods without going to the town council and getting a license, and a province has the right to do the same thing, but that is on a different basis. They are retail merchants doing business and this man is retailing from door to door, but large companies in this Dominion that have Dominion charters which give them the right to do business from the Atlantic to the Pacific and from the 49th parallel of latitude to the Arctic Ocean should not be restricted by provincial legislation simply for the purpose of raising revenue, a revenue that could be got from other sources without the anxiety and worry that it places upon business."

Only Pay Same Fees

MR. J. F. ELLIS: "Mr. Chairman and Gentlemen,—The provincial governments of the different provinces are not asking any of us that wish to do business in other provinces to pay the fees their own local companies are now paying; they are not asking us to pay a license for selling goods in other provinces by travellers. If we send a traveller into Manitoba, he is not called on to pay a license. He can sell all the goods he likes and we can sue for and collect the amount. All they ask of us is, if we are domiciled in a province, if we have a warehouse in a province and carry on business from that warehouse, that we pay the same fee as a company incorporated in that province has to pay by law. That, I believe, is all we are asked to do. I am open to correction.

"We have a place of business in Manitoba and we have to pay the same license for doing business in Manitoba as Bulman Bros., of which company our president is chief. We have the same to pay in Alberta and British Columbia, and we pay a fee in Ontario. Thsee fees are not very heavy. They have been very moderate in their charges. We have spent thousands of dollars already in fighting these cases; we have carried one or two to the Privy Council and we have lost. This one, I am fully convinced, after reading all the decisions of the different judges, we will lose if we carry the present case to that court, and I think it would be very unwise for us to spend any more money in that direction. If we were penalized and asked to do something that no competitor in each of these provinces was called on to do, there would be a grievance, but under the circumstances I don't think we have a grievance. They ask us to pay a license fee for carrying on business in each province, and they enact certain penalties if we don't pay that fee. They have got to do that. You make a law and, if you have no penalty attached to it and a man thinks it is unjust, he will not carry it out. So that I think it would be a mistake, and I think the membership should carefully think the matter over so



H. MACDONALD
Secretary, Legal Department, C.M.A.

that when they send in their opinions to the Legislative Committee we will know how to act for the great body of the Association."

MR. COCKSHUTT: "I believe the Association has spent about $25,000 on this case, and, even if we were to go to the Privy Council and get a favorable decision, I understand the provinces will pass some law which could overcome it. I also understand the Dominion Government is favorably disposed towards carrying on this thing in their own name. We have no real assurance that they will do so, but if they don't do something it stands to reason nobody will take out the Dominion license. I agree with Mr. Ellis. I believe it would be well if we could put it on to the Dominion Government to get them to carry out the terms, but I can't see that it would do any good to go to the Privy Council."

MR. SAM HARRIS: "Your Commitee have under consideration the very thing that has been spoken of. There are negotiations on at the present time where we hope the Dominion Government will carry this on. Your Committee feel the Dominion Government should validate their charters or quit issuing them, and I think, if you pass this on to the incoming Legislation Committee, you will find that they will carry

on to your satisfaction, and not be foolish enough to go and spend your money where it won't bring returns. I think it would be folly to pass upon it at the present time when the negotiations are on with the Dominion Government."

Provinces Have the Rights

MR. DAVIS (Newmarket): "I was just rising to say a word or two with reference to the question we have been discussing, the legality of charters, etc. I was a member of the local Legislature for a long time, and even in those days this matter was considered. In my early days we had one of the best lawyers on that class of cases in the Government and he stated then we would fight for the rights of the province to issue charters. He said it was our right and within our jurisdiction, and it is now turning out, after all the appeals to the courts, that that view is correct. The provinces have the right to levy taxes. I think there is no question at all that the position is one that is proper and right. I also agree, if the Dominion and local Governments could meet and talk this matter over and try to arrange some basis which would be in the interests of interprovincial trade, in which we are all interested, every province, as well as the Dominion of Canada, they ought to arrive at some safe, reasonable, fair and equitable division to work this thing out in the future. I don't believe we will gain anything by spending money going to the courts any further.

"May I say one word or two on the Workmen's Compensation Act? We, as manufacturers, from the time it was inaugurated and the Act placed under the jurisdiction of a Board appointed by the Ontario Government, have been very anxious at all times to do everything that was proper and right in the interests of the workingmen in connection with accidents. There are one or two phases in connection with the working of the law now which I think we ought to bring more to the attention of the members and also to the attention of the public generally and to the attention of the workingmen themselves. There is one phase of it where certain firms give bonuses at the end of a business year to employees whom they consider have been very faithful, have displayed initiative and good judgment and perseverance in adding to the production of the plant, and they want to show their appreciation to these men. They pay that bonus in addition to their salaries for this special reason. Now, the Workmen's Compensation Board in the last year or two, whether it is a change in the Act or exactly how it came about I don't know, but all those bonuses that are given by these progressive firms who are doing everything they can to assist their employees who show a willingness to use their brains in their business, these firms are taxed on them upon the compensation rate. I think the workmen themselves ought to stand behind us and object to any such course as that. I don't think it is proper or equitable or right if you want to do something specially for your men for this reason, that this Board should tax you because you do that.

Access to Accounts Wanted

"Another thing is this suggestion of a duly appointed representative of each group of manufacturers who shall have access to the accounts of the group funds. I think this is very important. I find in our group, according to the last notice we got, that our rate for the year is between four and five times higher than it was previous to the inauguration of this Board. We are all trying to make our plants better, and why this increased amount we are asked to pay should be required is beyond our comprehension. I think we have a perfect right to this access; the money is our own; we pay it; it is paid arbitrarily; we have no voice in the matter at all, and I do think it is only the reasonable and proper thing that we should have a committee appointed from each group that could go and find out exactly how the matter stands for their group. They might be able to give the Board a great deal of information that would be of value to them by examining these accounts and seeing exactly where this money is paid. I think we have a right to know where our money goes. There is not a municipality in Ontario that does not publish an abstract of all the accounts and every cent that is expended for every item during the whole year, and the people would not stand for it if they hadn't a right to have an abstract of these accounts and be permitted to examine them and make any criticism if necessary, or approve of them if no criticism were needed. I would like to ask why a Board like the Compensation Board should be in a position that they can cover up these accounts and we cannot find out how much is paid to each firm. I have no objection to having printed and published in a statement the amount of money paid by my firm to this Board and the amount of money received by the employees working for me from the funds of this Board. I think that should be done. I think it is a serious matter and it is one that would help the Board in many ways towards reasonable economy. We don't want to waste any money; it all comes out of the cost of the goods manufactured in this country, and the high cost of living is one of the reasons to-day, and all these things are going up and up and an additional charge being made upon the manufacturing industry ought to be examined into thoroughly. I do hope the Board will be reasonable and allow examination and publish full details of all expenditures in connection with that Compensation Board."

Manufacturers Have No Say

MR. HENDERSON (Windsor): "The point raised by Mr. Davis is a very important one. There is an old saying as true to-day as ever, 'No taxation without representation.' The manufacturers of Ontario are taxed and taxed heavily, but they have no say whatever in the administration of the money paid by them as compensation for workmen. A report was circulated, whether maliciously or not, that the Manufacturers Association were opposed in Ontario to the Workmen's Compensation Act, but I am sure everyone here knows that no body of men did more than the Manufacturers Association to try and get a workable Compensation Act, recognizing the fact that workmen were entitled to compensation and wishing to do away with the difficulties which pertained to the old law. At the same time it seems very hard that this Court, which I understand has powers not possessed by any other court in the British Empire, should expend the money and give no account. There is at the present time I understand a refund made to certain concerns where the accidents are below a certain limit. That is all very well as far as it goes, but is it fair that one in a group should be penalized because another firm in that group will not take proper precautions to prevent accidents? I brought this matter to the attention of the Chairman of the Board, and he said they had no power to appoint inspectors. I think that they have and it seems to me something should be done to amend the Act so that safety inspectors could be appointed with power to go into any plant under certain restrictions and say that such and such is dangerous and, if that is not carried out, the employer or owner of the factory ought to be punished or made amenable to the law in some way or other.

MR. J. F. ELLIS: "Might I ask Mr. Davis if he ever wrote the Workmen's Compensation Board asking them to tell him how much it amounted to—the accidents he had paid for in

the current year? They tell me they will do that with any man that pays any fee—any manufacturer."

MR. DAVIS: "In reply to Mr. Ellis, we keep a complete account showing the amount of money we pay in and also a record of all the money received by any of our employees and it is balanced every year and we know exactly what has happened ever since that Act was inaugurated, and there is no difficulty in getting a statement from them which will harmonize with the statement we have. But, that is not my point. My point is that as to the money that is paid in there, which is millions of dollars per annum; each group have a right to know how much was received from each individual in that group and how much was paid back to each individual in that group, in order that they may know exactly where this money is being spent in connection with this Act."

MR. J. F. M. STEWART (Toronto): "I agree with Mr. Davis that full details of the receipt and expenditure of this money should be published, but there is a very great opposition on the part of some manufacturers against it being published. The moment that you publish the amount of money that you pay into the Workmen's Compensation Board you tell every other man in your same line of business the exact amount of your pay roll. To myself, I don't think that means anything. I think we are getting away from the point that it should be kept secret, but that is one of the reasons why it has not been published. The Workmen's Compensation Board will give to any man that goes up there full details regarding moneys received and paid in their industry.

"Within the last three years in one of the industries I am connected with, our rate was increased very materially, and we naturally wanted to find out the reason. We were provided with statements for the last two years showing exactly what each industry was assessed in that group and what they had paid in and what the employees in each industry in the group had taken out of it, and after we got that statement there was no argument at all. The Board had to get the money because they were paying it out; and I understand, Mr. Chairman, that that information is available to any representative body of employers who want it.

Inspectors are Appointed

"In regard to what Mr. Henderson said, the Workmen's Compensation Board at the present time do appoint inspectors, and that is about the only branch of the business that we have been able up to the present time to keep out of the direct control of the Government and the Workmen's Compensation Board. The Workmen's Compensation Board at the present time appoint inspectors, but they appoint them on the recommendation of the Industrial Safety Organization in the Province, and this organization has a paid secretary who is paid out of the general funds, and this paid secretary controls the inspectors, and these inspectors are handled just the same as you men handle your commercial travellers.

MR. W. H. SHAPLEY: "Mr. President, this is an important matter I think in connection with the Compensation Act, and one that I think we have been overlooking quite a long time. Mr. Davis has already told us that it is the manufacturers who are paying all this large amount of money that is being handled by the Compensation Board every year. Now I believe it was a matter that was overlooked when this Board was being formed. Perhaps there were too many other things to be attended to at that time, but I believe the most important thing is that we should have a representative on that Board. The Board, as composed at the present time, appears to be a pretty close corporation and it is very hard to get the information we would like to get from them, and I believe, on account of the manufacturers paying the whole amount of money that is being collected and distributed in this way, we have a right and we should demand our right to have our representative on that Board. In discussing this matter with some others a short time ago it was claimed if the manufacturers asked for a representative on the Board, the labor people would ask for a representative too. I don't know that I would object to that."

MR. SAM HARRIS: "Mr. Chairman and Gentlemen,—Mr. Stewart mentioned that there was an organization which was called the Safety Association, but some of those who are taking an interest in the working of these Associations believe that they are not operating as effectively as the expense warrants. To be sure they have a secretary and we have; they call themselves safety engineers; we call them factory inspectors. I think the expense during the year that is charged up to the employers in the different groups, not including lumbermen and two others, is somewhere around $25,000. The work of these inspectors is practically work that overlaps the Ontario factory inspectors. The work is no better and no more efficient as far as I can see. Therefore, some of us contend they should either do better work or abolish the Department and save the $25,000 that comes directly out of the manufacturers' pockets as against the expenses and salaries of the factory inspectors that come out of the labor department. I hope the coming year may see something done on that.

Want Information as a Right

"With regard to any information that you might get from the Board, which Mr. Stewart happened to mention, it is now by courtesy; we want it by right. When you go up and ask for it, you get it if you are good, and you don't get it if they don't want to give it to you. We want it by right, and as Mr. Davis says these safety associations in their expenditure should be able to check up the results of the cost. By doing that, you will get somewhere, but if you are spending and you have no chance of checking up the matter, how can you possibly get the best results?

"I want to draw your attention to one right that they claim, and that is the powers not possessed by the body that created them. In the Government of Ontario every dollar that comes in is criticized, not only in committee, but can be criticized in the House, yet they grant powers, or they claim the powers are granted to the Workmen's Compensation Board that they shall be free from criticism of the moneys paid in and out. That seems to me absolutely against the law, and I think it could be upset, but your Committee has endeavored to work with the Workmen's Compensation Board and the Government in getting a good Workmen's Compensation Act; and during the trying times of the war we had no desire to put anything in their way that would hamper them in the carrying out of that. You will notice in the report the Committee states we have some rights that we will probably exercise. That is regarding these very items."

The question was called for. The President put the motion to adopt the report which, on a vote having been taken, was declared carried, and the report adopted.

The Legislation Committee has discussed with the Department of Justice the question of proceeding further with these cases, and the Dominion Government have expressed their willingness to carry an Appeal to the Privy Council at the Government's expense. It is hoped that in this way the position of Dominion companies will be defined for all time.

Report of the Transportation Committee

Careful Review of the Year's Developments in the Field of Transportation—Export Trade Facilities—Freight Classification and Rates—Special Services and Arrangements and Other Transportation Matters

Presented by

W. R. BREYFOGLE

Chairman, 1918-19, Transportation Committee

DURING the past year your Committee has given close attention to the general transportation situation, and begs to report as follows:

Government Ownership or Operation.—In Canada the Government was obliged to take over the Canadian Northern Railway. It, together with the Canadian Government System (the old Intercolonial Railway), has been incorporated under the name of the Canadian National Railways. Although the suggestion was made at the time the Bill of Incorporation was before Parliament, that all receipts from operation of the system should be paid into the consolidated fund, and the expenditures charged thereto, the Minister of Finance took the position that the system should be operated as a separate entity. It is believed that this action will receive the general endorsement of the public.

There are two other features of the Bill which are of importance. First: Section 14 places the operation of the system under the control of the Board of Railway Commissioners. Second: Section 15 gives the public the right to sue the railway in any court of competent jurisdiction, as well as the right to appeal to a higher court. The Bill also provides for the taking over of other railway companies.

In taking the above action your Committee believes that the Government has demonstrated a desire to remove the operation of these properties, as far as possible, from political interference.

Briefly, the Canadian National Railways will be operated to all intents and purposes as a private company, the public to have the right of appeal to the Board of Railway Commissioners and to the courts, as previously outlined. Both these rights were denied in the case of the Canadian Government Railway System.

Position of the Grand Trunk

The Grand Trunk Pacific Railway is now being operated under a receivership appointed on application of the Government, the latter being the chief creditor. It is fully expected that the road will be taken over as part of the Canadian National Railways.

Whilst nothing definite has been announced in respect to the Grand Trunk Railway System, the general belief prevails that it also will be purchased by the Government, in which event it will be merged in the Canadian National Railway System.

As far as the Canadian Pacific Railway is concerned, it stands in an entirely different position. There is no substantial reason why it should be interfered with, in fact the reverse is the case, and it was recommended in the Report of the Royal Commission on "Railways and Transportation in Canada," published in 1917, "that the status of the Canadian Pacific Railway should be left undisturbed." Competition is absolutely necessary in order to secure proper and adequate service. Furthermore, the Canadian Pacific Railway Company has proven, beyond doubt, its ability, not only to compete but to lead in the transportation world. It has probably assisted to a greater extent than any other agency in building up Western Canada.

Your Committee trusts that the Convention will carefully consider the resolution which will be submitted at the proper time bearing on this question.

In the United States the question is altogether different. Notwithstanding the large increases allowed in rates of all kinds, there has been a heavy deficit in net operating income since the Government assumed control. Walker D. Hines, Director General of Railroads, United States Railroad Administration, stated that the solution of the problem was the return of the properties to their owners at the earliest possible date, which will probably be the 1st of January, 1920.

Enormous Increase in Costs

Cost of Operation and Maintenance.—There has been an enormous increase in the cost of operation and maintenance in the past few years, particularly in the matter of wages in 1918. The placing in effect in Canada of the McAdoo Award, together with its various amendments, has increased the wages of railway employees by approximately $67,000,000. An application is now pending for revision of wages in the Locomotive and Car Departments of the railways, which, it is estimated, will add, approximately, $19,000,000 per annum to the present payroll. In addition, it has been estimated that increased expenses, owing to increased cost of railway materials, represent $14,000,000 for the present year. The increase of 25 per cent. in freight rates has been estimated at $43,000,000. This, however, is based on the volume of traffic handled in 1917. As there has been a great falling off since the signing of the Armistice, this figure may not be representative.

The placing in effect of the McAdoo Award in the United States increased the wages by over $800,000,000 for the year 1918. The net operating income for the same year was, approximately, $750,000,000. Under the Railway Control Bill the Government guaranteed a return of approximately $950,000,000. From this it will be seen that the net operating income fell short of the guaranteed return to the extent of some $200,000,000. In this connection the fact should also be considered that there has been a great falling off in traffic since the signing of the Armistice.

Export Trade

Steamship Service.—During the war the various services from both the Atlantic and Pacific Coasts were greatly disorganized, owing to the requirements of the Imperial Government in handling troops, munitions and supplies for the armies of the Allies. To certain countries, however, such as New Zealand, Australia, South Africa and the West Indies, commercial traffic was maintained to a limited extent. During the past year, due to the cessation of hostilities, some of the vessels have been returned to their former trade routes. There are to-day services between Canadian Atlantic ports and the United Kingdom, France, New Zealand, Australia,

South Africa and the West Indies, also between Pacific Coast ports and New Zealand, Australia and the Orient. A service has recently been inaugurated between Canadian Atlantic ports and the Eastern Coast of South America. The number of vessels in these services, of course, is considerably smaller than prior to the war, except, perhaps, to the West Indies. In so far as vessels are concerned, this service is normal.

Space on Ocean Vessels.—Representations were made to the Imperial Government through our Government for space on vessels to carry commercial traffic, as a result of which the British Ministry of Shipping allowed, in January last, 10 per cent. of available space for this traffic. For February this was increased to 30 per cent., and for a short time in March to 50 per cent. However, it was found that the British Ministry of Shipping required more space, and the amount was reduced to 30 per cent. This caused a congestion of both British Ministry of Shipping and commercial traffic.

The question has been taken up with the Government and from present reports it is believed that the situation will be relieved somewhat in the very near future.

Inland Rates.—General Order No. 28, popularly known as "McAdoo's Order," allowing a 25 per cent. increase in rates in the United States, required the railway companies to cancel all import and export rates. Representations were made to the Government, as a result of which this Order was modified. Order-in-Council P.C. 1863, allowing a similar advance between points in Canada, however, did not require cancellation of these rates. The judgment stated that the Canadian rate structure and traffic conditions did not permit similar action. The export rates, therefore, were adjusted to the ratio of the rates from United States points to Atlantic ports, as required by a former order of the Board.

Import rates were similarly dealt with.

Reductions in Rates

It will be seen that in so far as these rates are concerned, the Canadian manufacturer is in the same position as the American manufacturer in contiguous territory.

In order to move traffic to the Orient, New Zealand and Australia via Pacific ports, reductions were made on February 21st in the export rates from Eastern United States points to Pacific ports, the Canadian lines taking similar action, effective April 25th. These reductions were quite material on some lines.

Ocean Rates.—These rates declined considerably shortly after the signing of the Armistice, and by February 1st had reached $1.00 per hundred pounds, or 50c. per cubic foot, to United Kingdom ports. However, owing to the fact that only 30 per cent. of space was available for commercial traffic, some lines have since quoted and received $1.50 to $2.00 per hundred pounds, or 75c. per cubic foot. It is expected that this situation will be relieved in the course of the next few weeks.

Documents.—The question of reinstating the joint rail and ocean bill of lading was taken up with the carriers, but they could not see their way clear to its reinstatement. The difficulty seems to be that delays are likely to occur at the seaboard, and neither the railway companies nor steamship companies wish to take responsibility for demurrage. The carriers and steamship companies have had the matter under consideration, and from recent reports it would appear that this form of bill of lading will be put into effect at an early date.

Trade with Newfoundland.—While this traffic is not considered as export from a transportation standpoint, so far as the Canadian manufacturer is concerned, Newfoundland is an export market. A great deal of difficulty has been experienced by members in shipping goods to this country, owing to the fact that facilities are inadequate. Representations have been made to the Government, the railways and the steamship companies, and assurances have been given that the question will be given immediate attention by all concerned.

The Department of Trade and Commerce has announced that, effective June 1st, a new steamship service will be inaugurated between Montreal, Quebec, Charlottetown, Sydney and St. John's, Newfoundland, the steamer to make two trips per month. This should assist in handling traffic to Newfoundland.

Freight Classification

Applications for Changes in Ratings, Rules, etc.—During the year a great number of applications have been dealt with



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Retiring Chairman, Transportation Committee

by the Department. Those dealing with the following commodities have been disposed of:

Alimentary Paste.
Asbestos Cement.
Asphalt Shingles.
Bumper Guards or Rails.
Coal Chutes.
Cobblers' Outfits.
Corkwood and Corks.
Cultivators (hand).
Dummies or Forms (dress).
Graphite.
Ice Cream Cones.
Kalsomine.
Phonographs and Furniture.
Pole Line Hardware.
Prepared Poultry Food.
Rubber and Rubber Goods.
Soap (common).
Staples (wire).
Stove Putty.

Those still under consideration are as follows:

Boots and Shoes (rubber).
Cocoa Butter.
Filing Cases and Supplies.
Jams and Catsup.
Ladders, Swings, Baking and Ironing Boards.
Leather (artificial).
Machines (meat or food cutting or slicing).
Pump Jacks.
Sesqui Carbonate.
Specifications for loading and bracing sewerpipe on flat cars.
Trunks, nested.
Vegetables (dried).
Vehicles (self-propelling on flat cars).
Washing Machines (with water motor).

Proposed Changes in Ratings, Rulings, etc.—In the past year the carriers submitted one supplement to the Board of Railway Commissioners for approval. This is known as proposed supplement No. 12 to Canadian Freight Classification

No. 16. A number of advances mentioned therein, covering the following commodities, have been satisfactorily dealt with:

Carboys, empty, returned.	Oil Cloth.
Ice Cream Cones.	Paper Boxes.
Leather.	Wooden Boxes.

Proposed Classification No. 17.—During the past year this question has been taken up by the carriers with certain Boards of Trade throughout the West, and it is understood that some agreements have been entered into. However, both the Board of Railway Commissioners and the carriers have assured the officials of the Association that the question will not be disposed of in any way without first giving all those interested an opportunity of presenting their views in regard to the different changes contemplated.

It is understood that the carriers have in mind withholding action on this question until a decision is arrived at in the United States covering what is known as the "New Consolidated Classification."

New Consolidated Classification in United States.—The so-called "Consolidated Classification" in the United States has been considered at hearings before the Interstate Commerce Commission at various points throughout the United States, and hundreds of briefs have been filed on behalf of the shipping public and the carriers.

From information received, it is believed that the Interstate Commerce Commission cannot possibly render a decision in regard to this question until late in 1919, and that the new Classification will not become effective, therefore, until some time in 1920.

25 Per Cent. Increase in Freight Rates

The United States Railroad Administration, by what is popularly known as the "McAdoo Award," granted an increase in the wages of all railway employees. This increased the payroll of all roads operated by the United States Railroad Administration by several hundred millions of dollars. The Order was based on an investigation made by the Railroad Wage Commission, appointed by Order No. 5, made by the Director General of Railroads. To secure the revenue with which to pay this increase in wages, the Director General of Railroads issued Order No. 28, placing in effect a general increase of 25 per cent. in freight rates between points in the United States. It is true that some of the increases were not as great as 25 per cent., but there were others which were greater, so that on an average the increase was 25 per cent.

Following these Orders, the Canadian railway employees presented demands to the Canadian railways, asking for the adoption of the "McAdoo Award." The railway companies accordingly approached the Government and placed before it a statement showing that they were unable to meet the increases demanded without some financial aid. The Government thereupon requested the Board of Railway Commissioners to examine the question with a view of deciding what should be done. At that time, as is well known, the war was in progress, and it was absolutely essential that a strike should not occur on the lines of the railway companies. The Board recommended that in order to meet the demands of the railway employees, a general increase of 25 per cent. should be made in rates between points in Canada, along the lines of the advance made in the United States. Acting upon this suggestion, the Government issued Order-in-Council P.C. 1863. The Order disallowed the former increase of 15 per cent. in rates between points in Western Canada. Therefore, so far as points in Western Canada were concerned, the increase was 25 per cent. over rates in effect prior to March 15th, whereas in the East it was approximately 40 per cent. over rates prior to that date. The increases took effect August 12th, 1918, after a very short notice.

Since the Order was issued a hearing has been held in regard to the rates on sugar, and the Board recommended to the Government that certain modifications be made in the rates on this commodity until after the war. Order-in-Council P.C. 2080 was accordingly issued, making reductions from the rates ordered in P.C. 1863. Recently the matter was again reopened on the grounds that changed conditions warranted a return to the basis as ordered by P.C. 1863. The Board of Railway Commissioners held a hearing and issued a Judgment recommending that Order-in-Council P.C. 2080 be rescinded.

In regard to rates on clay and sewer pipe, the railway companies, in publishing their tariffs, advanced these rates by an arbitrary amount of 1c. per 100 pounds, whereas Order P.C. 1863 required that they be advanced 25 per cent. The question was taken up with the Board of Railway Commissioners, and an order issued requiring the railways to carry out Order-in-Council P.C. 1863.

Freight Rates

Joint Rates between C.N.R., C.P.R. and G.T.R.—This question, which has been before the Board of Railway Commissioners for some time, has not as yet been dealt with by that body. It is understood, however, that it is being held in abeyance pending the completion of the organization of the Canadian National Railways.

Transcontinental Rates.—A readjustment of rates affecting traffic moving from points in Eastern Canada (east of Port Arthur) to Pacific Coast points, became effective on August 1st. This readjustment meant a considerable increase in rates, but was made necessary by increases and readjustment of the basis in the United States.

For a number of years the rates from Eastern Canada were made by adding arbitraries to the current rates applying from Chicago to Seattle. The new rates referred to above are on a slightly different basis, brought about by the change in basis of rates from points in the United States (East of the Missouri River) to United States Pacific Coast ports. Prior to March 15th, 1918, rates from points in the United States, East of the Missouri River, to North Pacific Coast terminals, were made on a blanket system—that is, the same rate applied from New York as from Chicago. After March 15th this was changed and the territory East of the Missouri River was divided into groups, the rates from Missouri River points being the basis, and arbitraries were added to make rates from points East thereof. In revising similar rates between points in Canada, this new condition had to be taken into consideration. The territory was divided into three groups, the first one covering points as far east as Montreal, the second, Montreal to Quebec, and the third the Maritime Provinces, or, generally speaking, the groups were Toronto-Montreal, Sherbrooke-Quebec and St. John-Halifax. From the Toronto-Montreal group the rates were made the same as those applying from Buffalo to Seattle. Rates from the Sherbrooke-Quebec group were made half the difference between rates from the St. John-Halifax group and the Toronto-Montreal group. Rates from the St. John-Halifax group were the same as those applying from New York to Seattle.

New Rates Checked

These new rates did not include what are known as "class rates," as the latter have been on a purely Canadian basis since 1914, not being related in any way to American rates.

A proof of the Canadian tariff was submitted to the Department prior to publication, and a complete check was made of the new rates. A great number of errors were

found, and reported to the Railway Commissioners and the carriers, after which a conference was held and the discrepancies corrected.

Specific Commodity.—A great number of rates on different commodities were dealt with during the year, and satisfactory adjustments arrived at. Some of the commodities, together with a brief description of the territory covered, are as follows:

Fire Brick from Clayburn, B.C.
Coal from Minto, N.B. to Fredericton, N.B.
Extract (Tanners) from Southern United States to Canadian points.
Ferro Silicon from Welland, Thorold and Shawinigan Falls to Canadian points.
Fertilizer from Ontario points to Maritime Province points.
Glass Bottles from Wallaceburg, Hamilton, Montreal, Toronto, to Canadian points.
Hides from Montreal, Toronto, etc., to Eastern Canadian points.
Iron and Steel from Pittsburg, Pa., to Eastern Canadian points.
Doors, Sash and Trim from Midland to Western Canada.
Leather from Huntsville, Acton, Bracebridge, Kitchener, etc., to Toronto.
Lumber (Tan Bark) from various Canadian points to various Canadian points.
Pulpwood from Halifax & Southwestern Railroad to Liverpool, N.S.
Paper from Crabtree and Beauharnois to points in Western Canada.
Sand from Brockville, Ont., to Buffalo, Detroit and Canadian points.

In many cases the adjustment of rates on these commodities meant a considerable sum of money to the manufacturers interested. For example, the rates on fertilizers were reduced 1½c. per hundred pounds. A large tonnage of this material moves between the points mentioned.

Rates on pulpwood to Liverpool, N.S., meant a saving of approximately $1,700.00 on the quantity of wood ready to move at the time of the readjustment, and, of course, all future shipments will enjoy the lower rates.

Special Services and Arrangements Incidental to Transportation

Milling-in-Transit of Grain.—The Canadian Pacific Railway, both East and West, and all other lines in the West, proposed to advance their milling-in-transit charge from 1c. to 2c. per hundred pounds, effective November 1st. Interested members objected to the increase, asking the Board to postpone the tariffs, and require the railway companies to justify the advance. In March, 1919, the question was heard at Winnipeg, when the Association was represented. The carriers submitted statements and figures in an attempt to show the alleged cost of the service. A brief is to be filed on behalf of interested shippers in connection with carriers' presentations. It is estimated that the increase would amount to $300,000 per year.

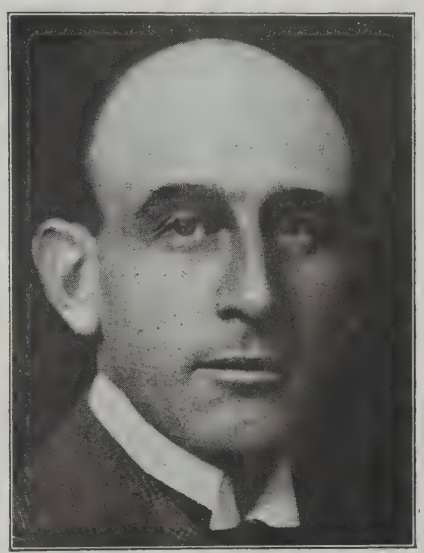
Interested members will recall that, effective November 1st, 1917, the Board required the Canadian Pacific Railway to reduce the stop-off charge in Eastern Canada to 1c. per hundred pounds for milling western grain, ex-lake, in transit. In the early part of 1918 the Dominion Millers' Association filed an application with the Board, requesting them to require the Grand Trunk Railway and other carriers in Eastern Canada to make similar reductions.

Dressing, Sawing, Kiln-drying or Sorting of Lumber in Transit.—Carriers submitted revised regulations covering this service, which contemplated an advance in the stop-off charge from 1c. to 2c. per hundred pounds, and a change in the regulations. Interested members have been advised, and have drawn up a memorandum of objections, which has been submitted to the carriers. A meeting is to be held in the very near future to dispose of this question.

Refrigerator and Heated Car Service.—An attempt has been made in the United States to make uniform charges covering these services, and consolidate them into one tariff. This desire for uniformity has also led them to increase certain of the charges.

The railways in Canada proposed to discontinue the practice of supplying interested shippers with information as to the amount of ice and salt supplied at each icing station. The matter was very thoroughly gone into, and it was decided that the service should be continued, as it was absolutely necessary, and was of assistance to the carriers as well as the shippers.

An increase has been made in the charge for ice and salt supplied to refrigerator cars by the carriers. The charge



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for ice at all points east of the Rocky Mountains is now $4 per ton, and the charge for salt 75c. per hundred pounds, and west of the Rockies, $5 per ton for ice and $1 per hundred pounds for salt. The minimum charge for ice supplied, however, has been set at $2.

The carriers also proposed to discontinue supplying meat hooks in refrigerator cars. The question was considered, and adjusted to the satisfaction of all concerned.

Minimum Weights

The Canadian Railway War Board, on behalf of the carriers, submitted to the Board of Railway Commissioners a proposal to make a general increase in the minimum weights of commodities moving under what are known as "commodity rates." Before any action was taken on this application, however, the Board required that a copy be sent to the Association, and the matter discussed with a view of finding what effect the new minima would have. The question was then taken up with interested members, and their objections obtained, after which a meeting was held with representatives of the carriers, and the original proposal modified to meet the

views, as nearly as possible, of all concerned. A number of the commodities covered by the increases were as follows:

Bleaching Powder.	Petroleum and Petroleum Products.
Canned Goods.	Pig Lead.
Cooperage Stock.	Iron Pipe and Fittings.
Cotton and Woolen Mill Sweepings.	Salt.
Grain and Grain Products.	Starch.
Iron and Steel.	Stone.
Leather Scrap.	Sugar.
Linseed Oil.	Tankage.
Metallic Shingles.	Wallboard.
Paper.	Wire and Wire Nails.

In agreeing to the advances, it was clearly pointed out to the Board that interested manufacturers were doing so on account of the conditions existing at that time (July, 1918), and that it might be necessary to go to the Board, after conditions changed, asking for a reduction in such minima.

Engines and Threshers Requiring More than One Flat Car.—A proposal to withdraw special minimum weights on shipments of engines and threshers requiring more than one car when shipped to points in Western Canada, was abandoned by the carriers after consultation with interested members.

Demurrage

Application for Reduction in Rate to Former Basis of $1 per Day.—An application was submitted to the Board of Railway Commissioners for a reduction in the charge of demurrage to the former basis of $1 per car per day. So far the Board of Railway Commissioners has not dealt with the application.

Average Agreement.—It will be remembered that in dealing with the present demurrage regulations, the Board stated that no decision would be given in regard to what is known as the "Average Agreement" until after the war. It was felt by your committee that the time had arrived when this matter should be considered, and a request was accordingly made on April 2nd, 1919, that a decision be rendered. The Board has not as yet taken the matter up, but it is believed that a further hearing will be held, after which a decision undoubtedly will be given.

General.—The question of free time on export traffic and track rental charges on private tank cars were also considered.

Terminal Facilities and Services

Local Switching.—The carriers submitted to the Board of Railway Commissioners, in November last, a proposal to revise their local switching rates. The revision contemplated the establishment of specific switching rates on certain commodities between defined sidings at rates higher than those formerly in effect. On all other traffic, including traffic moving between team tracks, they proposed to charge the regular line-haul rate on the commodity and quantity shipped. This meant an enormous increase in some rates. The Board was successfully appealed to for postponement of the proposition. Conferences were arranged between carriers' and shippers' representatives, resulting in a great number of special items being agreed to by shippers directly interested. A hearing was later held before the Board, at which the Association strongly objected to the principle of charging line-haul rates for local switching movements. At the close of the hearing the Chief Commissioner intimated to the carriers that the proposition should be abandoned. However, the carriers have since filed further proofs containing the objectionable clause, and suggesting that the Board allow it to become effective. The matter is before the Board for decision at the present time.

Interswitching.—The new interswitching order issued by the Board of Railway Commissioners, and known as General Order No. 252, was made effective by the carriers in tariffs filed by them on January 1st, 1919. The clause in the former Order (General Order No. 230), preventing owners of private sidings from routing their own freight, following representations made by the Association, has been eliminated from the new Order. In regard to this feature, the Board subsequently issued orders rescinding former orders requiring traffic to be routed via certain lines. Some of the carriers appealed from these orders on the grounds that they should have the right to route the freight under certain conditions. Your committee strongly objected to this, resulting in the original Order being sustained.

Early Closing of Freight Sheds.—In view of the eight-hour day under which railway employees are working, the carriers found it necessary to restrict the hours of opening and closing their freight sheds.

Railway Act

The Bill to amend the Railway Act passed the Senate, and is being considered by the Railway Committee of the House of Commons. A number of amendments, in which the members of the Association are interested, are being considered. Some of them have already been passed, while others are under discussion. It is hoped that the question will be disposed of at this session.

Claims

The Department handled during the year loss, damage and overcharge claims amounting to $40,514.22. Of this, $11,850.73 was paid, $9,850.74 declined, and there is still under negotiation claims amounting to $18,812.75. It might be well to point out in regard to the amount declined that $9,520.50 covered one claim, and represented an amount not properly collectable from the carriers.

All claims handled by the Department are those which have been dealt with by individual shippers without success. In many cases they have been declined by the carriers. It is quite reasonable to state, therefore, that the amounts paid have been saved for the interested members by the action of the Department.

Collection of Freight Charges

Credit Arrangements.—This question, which was first brought up by the carriers in the fall of 1918, has been satisfactorily disposed of by the issuance of Canadian Railway War Board Circular No. 107, effective June 1st, 1919. It has occupied a great deal of time and attention of both your committee and the department during the past year.

The original proposal of the carriers was to restrict the credit period to forty-eight hours. This was later modified to ninety-six hours, but a clause was inserted in the circular embodying the regulations requiring that a bond be supplied to insure the payment of freight charges. Several meetings were held as a result of which postponement was arranged to March 1st. However, as the carriers had not removed the clause requiring the bond, further postponement was requested. The railways at first refused, but later granted postponement to June 1st. On May 6th, Circular No. 107 was issued by the Canadian Railway War Board, removing the objectionable clause and greatly modifying the original circular. The new regulations are practically the same as those which have been in effect for a great number of years.

Car Service

Prior to the signing of the armistice, every effort was made by carriers and shippers to utilize all available space in freight cars by heavier loading and reduction in the time for loading and unloading at point of shipment and destina-

tion. Since that time conditions have changed somewhat, as the railway companies are now looking for loads for their cars.

Freight Tariffs

Information, Distribution and Charges.—Tariffs issued by the railway lines in Canada are now being charged for. In the east they are distributed direct by each line, and the account for the charges is rendered by the Canadian Freight Association. In the west both the distribution and the account is handled by the Canadian Freight Association at Winnipeg. Owing to the change in conditions in the east some difficulty arose as to distribution, but after negotiation with some of the carriers certain changes were made, and tariffs are now reaching those interested in much better time.

In order to keep members in touch with new tariffs and supplements which are issued, the Transportation Department sends out a monthly circular known as "Freight Changes," showing tariffs and supplements filed with the Board of Railway Commissioners for the month prior to the date thereof. This circular is only sent to members who have signified that they are interested in keeping tariffs on file.

Weighing

In Western Canada, as well as in the United States, the carriers have been handling shipments in standard packages and of a certain class on which the weight can be readily checked under weight agreements. These weight agreements facilitate the movement of traffic, as each individual shipment does not have to be weighed by the carrier. In order that the practice in Canada may be uniform, the Canadian Freight Association inaugurated new weight agreements, effective May 1st, to cover shipments originating at points in Eastern Canada. These new weight agreements are similar to those used by Canadian carriers in Western Canada, and take the place of the former individual agreements issued by the carriers.

Railway Construction

Canadian National Railways Branch, Kamloops to Kelowna.—The assistance of the committee was asked in securing early completion of this branch of the Canadian National Railways. The question was taken up with officials of that Company, and assurances were given that construction would be started at an early date. Appropriations, we are advised, have since been arranged.

Siding Agreements

The Department was requested to assist members in connection with siding agreements, the following being those dealt with:

Iona Gypsum Company.
Muskoka Wood Company.
Napanee Iron Works.
Riordon Pulp & Paper Company.
W. H. Stacey.

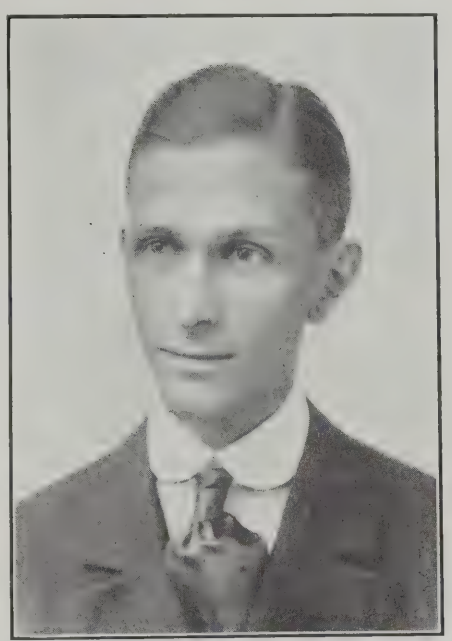
Express

Claims.—The effect of the $50 limitation clause appearing on the receipt form issued by the express companies was very forcibly brought to the attention of a number of shippers, due to a fire which destroyed one of the express company's cars. Many of the shipments in this car were valued at hundreds of dollars. In making out the Express Company's receipt, however, shippers did not state the actual value. When claims were adjusted the Express Company accordingly tendered $50 for each shipment where the value was $50 or more. Many shippers felt that the limitation clause was not binding. The matter was gone into very carefully by the Transportation Department, and an article prepared for INDUSTRIAL CANADA, which showed quite clearly that the Express Company was within its rights in making settlement on the basis of $50.

Classification.—Five supplements have been submitted by the Express Traffic Association for Canada during the past year, containing various changes in ratings and conditions of carriage covering shipments by express.

Under this heading is also included new marking and packing regulations covering a number of different commodities which have been submitted to the Board of Railway Commissioners for their approval.

Pick-up and Delivery Service.—In connection with the proposed general revision in express rates, the Express Companies submitted a new basis for determining the free delivery limits at different points where such service is rendered. Briefly, the new basis contemplates extending the delivery service to sections of the community having a population of one hundred to each quarter-mile square.



S. B. BROWN
Assistant Manager, Transportation Department

General Revision of Rates.—The Express Traffic Association for Canada, on behalf of the Express Companies, submitted an application to the Board of Railway Commissioners in November, 1918, proposing a general revision in the basis of express rates. The application stated that this meant an increase of 37 per cent. east of Sudbury and 25 per cent. west thereof. Hearings were held in various parts of the country from coast to coast, and a great deal of evidence submitted by interested shippers, the Association being represented at the principal hearings. This evidence showed that the increases actually meant considerably more than the application stated. On general merchandise it approximated 60 per cent., on cream 107 per cent., on aerated and mineral waters 137 per cent., on food products 45 per cent., and on fish as high as 150 per cent to 200 per cent. It seemed to be the general opinion of the majority of shippers that if the Board found the Express Companies needed more revenue, they would be willing to stand a certain increase, provided it was a straight percentage over the present basis of rates, the chief objection being against the change in the basis. The final argument in this case was heard at Ottawa in

March, since which time the Board has been working on the evidence with a view of rendering a judgment.

Telephone

The Bell Telephone Company made application to the Board of Railway Commissioners for an increase in rates on the ground that the increased cost in supplies, labor, etc., made it necessary that they secure more revenue. The Board of Railway Commissioners has recently rendered a decision in connection with this question, which allowed advances as follows:

The new rates for exchange will be 10 per cent. higher than the old rates, instead of an increase of 20 per cent. as asked for by the Telephone Company. The new schedule of long distance rates proposed by the Telephone Company has been approved. The principal change is in the hours during which night rates are applicable. At present the night rates apply from the hours of 6 p.m. to 6 a.m., and are 50 per cent. of the day rates. Under the new tariff the night rates will not commence until 8.30 p.m., from which time until 11.30 p.m. they will be 60 per cent. of the initial day rate, and from 11.30 p.m. to 6 a.m., 40 per cent. of the initial day rate. The initial rate is for the period of three minutes and each overtime minute will be charged for at one-third of the initial rate to the next lower multiple of 5c. The new day rates are computed at 10c. for the initial three minutes up to eight miles with 5c. added for each additional eight miles. The overtime rate is one-third of the initial rate for each overtime minute to the next lower multiple of 5c. The basis of computing the distance is actual air-line mileage between exchanges.

The railway companies filed tariffs with the Board of Railway Commissioners, effective February 1st, 1919, increasing their return fares between various points in Canada.

The train services which were curtailed during the war have been gradually re-established.

Coal

With a view of conserving coal during the war, the Government made an investigation of various industries more or less non-essential, from which it was learned that these industries were using only a small portion of the coal used in pre-war years. In other words, their business had been curtailed by the war to such an extent that they required but a small portion of the coal they formerly used.

Owing to the cessation of hostilities and the very mild winter of 1918-19, the coal question was not a very serious one. Reports from the mines, however, indicate that there may be a shortage in the coming winter.

Changes in the Department

As the staff of the Association has been reorganized during the past year, the committee thought it well to give a brief survey of the changes made in the Transportation Department.

Mr. J. E. Walsh, Manager, has also been appointed General Manager of the Association. As his new duties require all of his time, Mr. S. B. Brown was appointed Assistant Manager. In addition two assistants have been added to the staff of the Department to handle the details of the increasing work.

During the past year it has been necessary to attend innumerable meetings. The change from war to peace conditions brought up many questions, which had to be settled by conference. In addition to this, 6,204 letters were received and 8,065 written.

The increased demand for information covering rates from the United States has made it necessary to acquire tariffs applying from that country to points in Canada. While a complete file of these tariffs could not possibly be maintained with the present staff, a great number have been obtained, and will be kept on file for the information of members.

The Canadian Pulp & Paper Association, the majority of whose members are members of the Pulp and Paper Section of the Canadian Manufacturers Association, have appointed a traffic representative, Mr. G. P. Ruickbie, whose activities come under the jurisdiction of the Transportation Department. This appointment, in so far as the Association is concerned, is to continue as a trial for one year.

Mr. Walsh continues to exercise special supervision over the Department, and attends all hearings of the Board of Railway Commissioners, in which members of the Association are interested. A great number of hearings have been held during the past year.

All of which is respectfully submitted.

W. R. BREYFOGLE, *Chairman.*

S. B. BROWN, *Assistant Manager, Trans. Dept.*

J. E. WALSH, *General Manager.*

Discussion on the Report

The motion to adopt the report was moved by Mr. Breyfogle, chairman of the committee, who said: "There are just two points I want to draw attention to, the first of which is a resolution to be offered in due time having regard to the maintenance of the integrity of the C.P.R., and, secondlly, the necessity for shippers to support the Government with regard to the export service with South America. The Trade Commissioner for South America, Mr. Webb, said it was absolutely necessary we support these boats from Canadian ports to South American ports especially. I just wanted to mention that in moving the adop tion of the report."

MR. J. F. ELLIS: "I have a great deal of pleasure in seconding the adoption of the report of the Transportation Committee."

MR. SHAPLEY: "I would like to ask Mr. Walsh with reference to this paragraph on page 17, 'Pick-up Delivery Service,' if that remedies the difficulty in Earlscourt?"

More Extended Service

MR. WALSH: "I think it will take care of it to a very considerable extent as far as Toronto is concerned; it will result in the cutting out of the service possibly in some of the smaller places. Competition has from time to time for years now about forced the companies to give service in small towns of probably two or three hundred inhabitants. It is just possible that that service will be discontinued. However, insofar as the larger centres are concerned, the service is likely to be extended. Take Montreal, the service will cover the entire city, which they have not got at the present time, and it will also be extended very materially in Toronto if this proposal goes through."

MR. A. H. BRITTAIN (Montreal): "I cannot allow this report to pass without complimenting the chairman of the committee and the manager of the department on the able report which they have presented. I feel that the Association is indebted to the Department for the valuable information which we get from that Department.

"I might just ask the Manager, Mr. Walsh, or Mr. Brown, in connection with the section on page one, which reads as follows: 'Briefly, the Canadian National Railways

will be operated to all intents and purposes as a private company, the public to have the right of appeal to the Board of Railway Commissioners and to the courts, as previously outlined. Both these rights were denied in the case of the Canadian Government Railway System.' I thought I would like to ask the manager whether that meant that in the case of products originating in the Maritime Provinces, which is practically covered by the old Canadian Government Railways, shippers will not have recourse to the courts and to sue the railway, and whether they can appeal to the Board of Railway Commissioners?

Cut Country into Zones

"My understanding of it—it may be changed—was that the first idea was to take the St. Lawrence River and to cut off the zone at the St. Lawrence River and put the Canadian National Railways under the Board of Railway Commissioners, the idea being that the Intercolonial Railway was originally put into the Maritime Provinces as a matter of Confederation to bring the two provinces together. I feel now that, as the Government has taken it upon themselves to operate a railroad from coast to coast, they should be put on the same basis as any other railroad and that we who are interested in shipments from the Maritime Provinces should be able to appeal to the Board of Railway Commissioners, and in the case of disputes, where necessary, appeal to the courts and to sue the Canadian National Railways if necessary."

MR. WALSH: "It is clearly my understanding that the Act provides that the old Intercolonial Railway will come under the control of the Board of Railway Commissioners insofar as operation is concerned. That also applies to the whole Canadian National Railway system. The Act is not altogether satisfactory to the privately-owned railways from the fact that it gives them certain rights in regard to expropriation. They do not have to appeal under certain conditions to the Board of Railway Commissioners in the case of construction, but insofar as operation is concerned the Board of Railway Commissioners will have jurisdiction. The same also applies to the question of the right to sue. As you know at the present time, you cannot sue the Canadian Government Railways."

MR. H. I. THOMAS (Ottawa): "I would like to ask Mr. Walsh whether there is any difference in the power of the Railway Commission over the Canadian National Railways as now constituted and the power of the Railway Commissioners over the C.P.R. for instance? My information is that the power is not the same and, if Mr. Walsh could clear up that point for me, it would be interesting. I understand the right to sue; I was aware of that; but in regard to the control of the Commission over the Government roads, my question is whether the power of the Railway Commission is identical with the power that they exercise over the Canadian Pacific?"

The Board's Jurisdiction

MR. WALSH: "No, it is not. It is my understanding that, insofar as the actual operation is concerned—and that means the running of trains and anything pertaining to it, and to the collection of tolls—they have the same jurisdiction as over the Canadian Pacific, but they have not got the same power with respect to construction. The Canadian Pacific Railway is limited and comes under the control of the Board of Railway Commissioners in certain matters that are not required in connection with the Canadian National Railways. I understand the Canadian Pacific took objection to that when the bill was going through the House, but the Government did not see fit to help them out at all. That is the only difference so far as I am aware, as far as they are concerned, and as to the actual operation of the railway, they have the same jurisdiction or will have."

The question was called for, and the president having put the motion to adopt the report, it was carried and the report adopted.



FOUR PROMINENT ASSOCIATION MEN

From left to right,—Henry Bertram, John Bertram & Sons Co., Limited, Dundas; J. R. Shaw, Canada Furniture Manufacturers, Limited, Woodstock; Sam Harris, Harris Lithographing Co., Limited, Toronto; E. G. Henderson, Canadian Salt Co., Limited, Windsor.

Net Gain Made in Association Membership

Membership Committee Reports a Net Increase of 141 Members for the Year—Campaigns that Have Met with Success—Distribution of Membership and Fees Paid—Increase in Fees Approved

Presented by

W. C. LAIDLAW

Chairman, 1918-19, Membership Committee

YOUR Committee take pleasure in reporting a net increase of 141 in the membership of the Association during the past year. It is gratifying to record that our membership has not suffered during the trying conditions inevitably connected with the readjustment of the country from a war to a peace basis.

The membership work of your Committee was conducted by means of circular campaigns, appeals to members, co-operation with branches, and the efforts of the staff.

Systematic Membership Work

Your Committee urge that members of the Association in every industrial community make united efforts to induce all manufacturers in their territory to join the Association. Peterborough furnished an example of what can be accomplished by thorough and systematic membership work. In that city the manufacturers who are members launched a "Hundred Per Cent. Campaign" with the object of bringing all other manufacturers into the Association. A three days' canvass was made, and as a result every manufacturer in Peterborough to-day is a member of the Association.

Your Committee believe that, if similar campaigns were put in operation throughout Canada, many new members could be secured.

Your Committee supported the proposal to group the Association territorially into five divisions and to encourage the establishment of branches in the chief industrial centres in these divisions, in the belief that such action would increase membership and stimulate interest in the affairs of the Association. Consequently, your Committee gladly recommended the creation of branches this year in Niagara Falls, Brantford, Sherbrooke, and Victoria..

Your Committee also approved the formation of the following Trade Sections: The Ready-cut House Section, the Stone and Clay Products Section, the Woollen Manufacturers' Section, and the Shoe Manufacturers' of Canada Section.

Gain in Membership

The Association began the year on May 1st, 1918, with a membership of 3,389. The applications received and passed totalled 244, the resignations 103, bringing the total membership on April 30th, 1919, up to 3,530; a net gain of 141 for the year, as compared with 150 for the year 1917-1918.

The net result for the year ending April 30th, 1919, is derived from the following sources:

British Columbia	38
Maritime Provinces	38
Quebec	36
Ontario	34
	146
Loss in Prairie Provinces	5
Total	141

The net result for the year 1917-1918 was derived from:

Prairie Provinces	91
Ontario	35
Maritime Provinces	20
British Columbia	8
	154
Loss in Quebec	4
Total	150

The actual cash collections from fees for the year ending April 30th, 1919, were $86,475.00, being an increase of $8,075.00 over the previous year.

The following table shows the distribution of the membership in each province, indicating the amount of fees paid:

By Provinces	$10	$15	$20	$35	$50	$75	$100	$150	$200	T'l.
Ontario	424	524	422	209	146	107	51	27	15	1925
Quebec	149	219	166	82	63	61	21	16	14	791
Nova Scotia	18	54	12	7	9	3	1	1	2	107
B. Columbia	32	37	15	9	8	4	2	2	1	110
New Bruns'k	20	20	23	15	3	5	2	2	—	90
Manitoba	184	76	37	19	8	5	1	—	—	330
Alta & Sask.	85	53	20	6	3	—	1	—	—	168
P. Ed. Island	4	3	2	—	—	—	—	—	—	9
Total	916	986	697	347	240	185	79	48	32	3530

In dealing with resignations the usual practice has been followed of accepting only after it is made apparent that the membership cannot be held. The loss in revenue from resignations accepted for the past year, chiefly owing to liquidation and amalgamations, was $1,715.00. This does not take into consideration a possible loss from resignations that have been received but not as yet accepted and fees overdue and still unpaid.

Question of Fees

To offset the possible loss from the above sources, we received from new memberships during the past year the sum of $5,455.00. Personal solicitation for new members is the most satisfactory method of increasing the membership, and as the time of the present staff is fully taken up with other matters, consideration is now being given to the appointment of travelling representatives. It is estimated that their upkeep could be largely met by extra revenue derived through new memberships and the continuance of memberships that can only be held by a personal call.

Your Committee considered a schedule of proposed increases in the membership fees, and approved a total increase amounting to $43,365.00, provided that the need for greater revenue was apparent. The Executive Committee endorsed your Committee's schedule and approved of further increases amounting to $9,455.00, bringing the total gross increase to $52,820.00.

Your Committee respectfully urge that, as the extraordinary and difficult problems now facing industry require the

co-operation of all manufacturers, special efforts be made by every possible means to induce manufacturers who are not now members to join the Association.

All of which is respectfully submitted.

W. C. LAIDLAW, *Chairman.*
J. T. STIRRETT, *General Secretary.*
J. E. WALSH, *General Manager.*

Discussion on the Report

The motion to adopt the report of the Membership Committee was moved by Mr. W. C. Laidlaw, seconded by Mr. C. Howard Smith. Continuing, Mr. Smith said:

"I would like to say a few words about membership. The Chairman has spoken of the necessity of getting members, and looking at the numbers present there are a great many manufacturers who should be members of the Association. In Montreal this year we put on a campaign and increased our membership somewhat, but not nearly as much as we should have done. At the present time there is no manufacturer that cannot easily get value for his money in joining the Association. The old saying is, in union there is strength. The more we get in the Association the better off we are. I would like to urge upon the members here to try to bring in some manufacturers as members of the Association. Besides having their influence, we also need the money. We are spending a great deal of money now, and we have got to get more money to spend, and that is one way of saving ourselves from being taxed so high."

Welcome Younger Members

MR. MEADOWS (Toronto): "As one of the older members of the Association, I think this is a fit time for me to say what I would like to say. A survey of this meeting, Mr. President, reveals a very large number of new faces. As one who has not been actively engaged in the Association work for some few years, I miss the faces of a great many of those who used to be very busily engaged in all the activities of the Association. I also miss in this Convention the taking part in the discussions of a number of people 'as used to be.' I for one am very glad to hear the voices of the old members, but I would be very much pleased indeed, as I am sure the rest would be, to hear the voices of the new members. I don't know whether these new members feel absolutely free to take part in these discussions, but I would like it to be understood, Mr. President, as from you and from the older members, we always welcome the suggestions and discussions of the newer members."

MR. H. I. THOMAS: "I would like to say a word. I think we ought to congratulate the Committee on the excellent work they have done. It is a work that entails a certain amount of personal sacrifice on their part, and the results have been fairly satisfactory, but I agree with Mr. Smith and the last speaker that we should have a great many manufacturers members of our Association who are not so now; and although I approve very heartily of the idea of having traveling representatives and the continuance of the work of this Committee, which I presume is expected, I feel that the best results can only be attained by individual effort of every member of the Association. I think if every member of the Association would endeavor to get one or two new members in his neighborhood during the coming year that that would bring about perhaps the very best results we could possibly look for. As Mr. Smith has pointed out, the expenses of this Association are growing very rapidly; coincident with that, the work of the Association is growing perhaps still more rapidly. You have established during the last year the Ottawa office and you are branching out in many different directions, all of which is very commendable. We ought to have in this Association practically every manufacturer in Canada, and I believe that that result can be approximated at least if every member would make it a personal matter to try to secure at least one other during the coming year. And, Mr. President, if that is done, it might be pointed out to the members, it will not be perhaps as necessary to raise the fees, because if we have a larger membership a smaller fee from that larger membership will of course produce the same results as a larger fee from a smaller membership."

MR. HENDERSON (Montreal): "I would like to add a word of approval to that idea of the last speaker. I think if we all work to get one or two members individually during the coming twelve months, apart altogether from the organ-

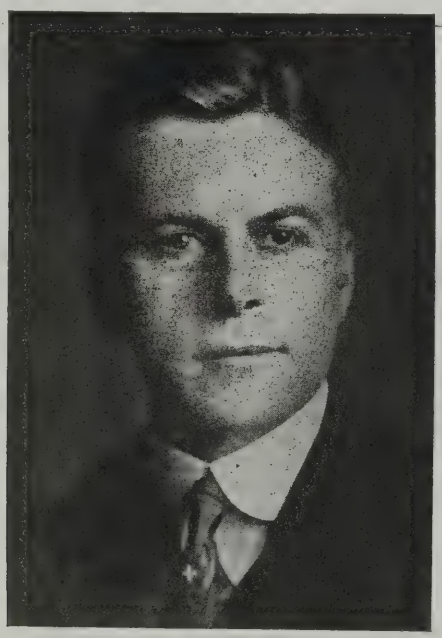


H. A. TELFER
Telfer Bros., Limited, Toronto
Chairman, 1919-1920, Membership Committee

ized efforts that will be put up from one part of the country to the other, we are going to bring a result which will be like the mail orders which come in in the morning, which bolster up and act as an auxiliary to the work of the salesmen, and at the end of next year it will be astonishing to us all. As a specific instance of what I refer to, I might mention as many as eight or nine years ago, when I was domiciled in Nova Scotia, and interested in the affairs of the Association down there, we put on a campaign in that little province that didn't have behind it any particular organized traveling expeditions or anything of that kind, but each one of us committed himself to the promise that he would get either two or three members within a reasonable length of time, and we didn't put it at a week so that we had to race about, but we put it at three months, and I think about nine-tenths of the gentlemen who committed themselves to that promise made good within the time specified. The result was that the membership from Nova Scotia increased, I think it was about two-thirds, during that year. So that I think it is a point that can be well insisted upon—the point that was made by the last speaker, that in addi-

tion to the organized efforts made by the manager, etc., we should each do our little part quietly and persistently."

MR. BREYFOGLE: "We have had the experience in Peterborough of going after some ten or eleven members outside of the Association—a matter that has been very kindly referred to in the report of the Committee—but we found it was absolutely essential to get after them on the personal side; men that we could approach and call by their first names and lay the benefits of the Association before were more easily secured by this means than by anything the Association could do in a circular way or even by a representative coming direct, and I am heartily in accord with the principal of personal work on the part of the members of the Association. There is not one of us but what has an influence with some one man outside of the Association and could bring him in without trouble on the part of the Head Office. Furthermore, my understanding is there are only



J. T. STIRRETT
General Secretary, Canadian Manufacturers Association

1,500 manufacturers outside of the Association in Canada, so that, if it would be possible for us all to secure one member, there is only 1,500 to secure. The personal work on the part of one or two men who are willing unselfishly and selfishly, because it works both ways, to go out and spend a day, will bring these men inside of the Association."

Members Should Get Members

THE PRESIDENT: "The suggestion thrown out that we assist in securing members is really the only membership work that can be done. Men will join the Association if their fellows in business show them the advantages of it and introduce them to the circles of the Association; otherwise you won't get them. That was our experience out West, and I think it is the experience all over. I think I can take it for granted that every member present at this annual meeting at least will pick up another member, and that will add quite a few of your 1,500 to our membership. Apart from the question of the Manufacturers Association being interested about the non-members, even some of our own members are exceedingly stupid as to what the Association does and can do for them. A few of them have taken the trouble to investigate and find out, but the chief value of this Association is its police features, its preventive features, which of course are not spectacular advertising features, but one has only to get in touch with the office and the work of the office to appreciate that. The only thing that is impressed upon the mind of myself and others from the West, who have come down here, is that the Association is run too cheap; we are expecting to get too much for the fees we pay, and I think if we do anything at all this year this increase of fees will be the biggest thing we do. I hope it will carry when the time arrives. Are you ready for the adoption of the report of the Membership Committee?"

Peterboro's Fine Example

MR. MCKINNON: "I believe the Committee has done noble work under the able leadership of Mr. Laidlaw. It might be interesting to know that in one City in Canada they started a campaign of this kind to have every manufacturer in the city who was eligible become a member, and the result was that a 100 per cent. efficiency was obtained. I think it will be interesting to know that that was the City of Peterborough. I am sure it was the well-known modesty of Mr. Breyfogle, who just spoke, which prevented him from mentioning that, but in Peterborough 100 per cent. of the eligible persons there are members of the C.M.A.

"I believe one of the difficulties the Membership Committee experience is that the non-members do not know the work that is carried on by this Association. In fact, one of the members, after the reading of one of the reports yesterday—a man of long standing in the Association—was really surprised to know the benefits he could receive from the Association simply upon payment of his dues. I believe we can all do better and follow the example of our good friends in Peterborough."

MR. LOWNDES (Toronto): "Peterborough has been mentioned, but why couldn't we take any other town? Do all the members of our Association, say in Chatham, know the other men in Chatham who are not members of the Association. I know in Toronto I don't know among my own trade who are members and who are not. Would there be any system which could be adopted so that we could take for instance the clothing manufacturers of Toronto and the members of this Association be notified that such manufacturers are not members of this Association? Wouldn't that give us something direct to work on?"

THE PRESIDENT: "The members of the Committee will note that suggestion."

MAJOR ANTHES (Toronto): "I would like to draw your attention to the fact that the joint committee of the technical organizations and the engineering organizations in Ontario desire closer relations with the C.M.A. A committee has been appointed by the joint committee of the technical organizations of which I am chairman. I would ask that the Membership Committee be requested to appoint a small committee to negotiate with the committee of the joint committee of technical organizations towards the object of effecting a closer relationship between engineers and manufacturers. As we know, we are now launching upon a very intensive period of development, and I think engineering is going to be one of the outstanding features in our industrial development. Also, we have kindred relations with technical and industrial education. Without going any further, I merely request that the incoming committee be requested to appoint a small committee to confer with the committee of the technical organizations.

The President put the motion to adopt the report which, on a vote having been taken, was declared carried and the report adopted.

Important Report of the Tariff Committee

Review of the Whole Tariff Situation in Relation to National Development —Progress of the Movement Towards Preferential Tariffs—Work of the Tariff Department in Connection with War Measures Restrictions

Presented by

L. L. McMURRAY

Chairman, 1918-19, Tariff Committee

THE three most important subjects dealt with by your Committee during the past year were the demand of Prairie Provinces' grain growers for an immediate and substantial lowering of the customs tariff, the adoption throughout the Empire of customs tariff preferences on Empire products, and the war trade embargoes of the Dominion of Canada and other countries.

To fulfil the national duties thrust upon this country by the ending of the great war, it was evident that confidence in the future outlook should not be shaken, and that progress toward stable commercial conditions should be hastened. Therefore your Committee viewed with great concern the recent active propaganda of Western grain growers for the complete removal of certain customs duties, and for sweeping reductions in others, coupled with proposals that the revenues lost by tariff reductions should be recovered through new taxation measures of a highly experimental nature. If these demands were granted, widespread depression would result, thousands of people would be thrown out of employment, and all classes in the country would suffer. Moreover, your Committee are convinced that the movement to secure these tariff reductions has in view, step by step, ultimate free trade between Canada and the United States.

Relation to United States

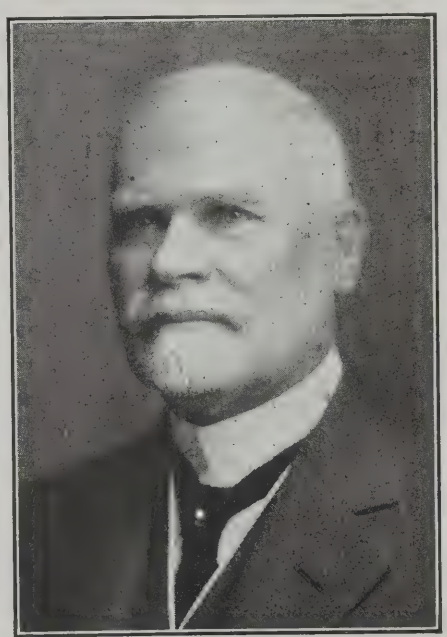
Under free trade with the United States the tariff of Canada against other countries would have to be the same as that of the United States. To realize this, one has only to remember that if our tariff were lower than that of the United States on articles made abroad, those articles would be imported into Canada and pass thence into the United States; and that if the United States tariff against other countries were lower than ours, shipments from abroad, under free trade between the two countries, would find their way to Canada through the United States. Thus, it follows that our fiscal policy would be determined, not in Canada, but in Washington.

This same view appears to have represented the mature judgment of ex-President Taft, and of the late ex-President Roosevelt. It was plainly stated in correspondence between these two great citizens of the United States during the United States-Canadian reciprocity negotiations of 1911. This correspondence was published by ex-President Taft in a speech at Boston, Mass., on April 25th, 1912, and the following is quoted therefrom, viz.:

Ex-President Taft to the late Ex-President Roosevelt—"The amount of Canadian products we would take would produce a current of business between Western Canada and the United States that would make Canada only an adjunct of the United States. It would transfer all their important business to Chicago and New York, with their bank credits and everything else, and it would increase greatly the demand of Canada for our manufactures. I see this is an argument made against reciprocity in Canada, and I think it is a good one."

The late Ex-President Roosevelt's reply to Ex-President Taft—"It seems to me that what you propose to do with Canada is admirable from every standpoint. I firmly believe in free trade with Canada for both economic and political reasons."

While the 1911 proposed reciprocity treaty represented an important step in the direction of free trade between the two countries, nevertheless its provisions fell a long way short of complete free trade. Yet that one important step in the direction of Free Trade with the United States, in the judgment of those two eminent men, would have reduced our present, separate, British nationality to the negative status of an "adjunct" to the United States. As the tariff changes demanded at this session of Parliament go much farther than the reciprocity agreement, toward free trade with the United States, the threatened danger to the future of Canada is proportionately increased. From these denationalizing agencies our protective customs laws, inaugurated forty years ago, preserve our country.



E. J. DAVIS

Davis Leather Co., Limited, Newmarket, Ont.
Chairman, 1919-1920, Tariff Committee

It is fundamental that the maintenance of our separate British nationality depends upon the retention of our freedom to shape our protective customs laws to serve our own needs.

What it means in our national development to be importing from the United States those commodities which should be made or produced here is aptly illustrated by this country's importations last year of free tractors. The number imported to the end of January, 1919, was 13,641, valued at $13,056,013, and if these tractors had been made in Canada the work would have given constant employment for one year to over 6,000 skilled mechanics. At three to a family, that would represent a city of 18,000. But by the importation of

these tractors, that city was maintained in the United States instead of in Canada.

Again, as regards importing direct by Canadian jobbers, if we had, as Western grain growers desire, free trade with the United States, everyone who thinks on the subject knows that this would sweep away all protection which Canadian jobbers and wholesalers enjoy in their direct dealing in European, Asiatic, and South American commodities. On account of the vast United States' shipping and their convenient ports, free trade between the two countries would develop United States' importing jobbing houses, United States' ports, United States' railways, United States' financial institutions, the United States' public revenues, at the expense of this country's wholesale merchants, ports, railways, financial institutions, and revenues.

International Differences

Then, too, it should not be forgotten that this Dominion represents merely a narrow strip of populated country, stretching for 4,000 miles along the northern boundary of the United States, in which country, throughout that whole distance, there are great industrial centres close to the Canadian border. The shorter freight haul from such centres to the Canadian West, as compared with the longer haul from Canadian industrial centres to the same points, would give those United States' manufacturers commanding advantages in our home markets, advantages which could not be offset except for our protective customs laws. Moreover, the traffic thus given to United States' railways would be taken from Canadian transcontinental lines, two of which, now controlled by our Government, already are operating at a loss.

In respect to this subject of national development, those of our legislators who would encourage greater imports of finished products from the United States do not seem sufficiently to comprehend the effect which their policy would have on the rate of exchange. The balance of our trade with the United States is heavily against Canada. The Trade and Navigation Returns of the Customs Department, Ottawa, show the adverse trade balance against Canada for the last six years, to be as follows:

Year ending March 31st.	Exports to United States.	Imports from United States.
1914	$200,459,373	$410,786,091
1915	215,409,326	428,616,927
1916	320,225,080	398,693,720
1917	486,870,690	677,631,616
1918	434,036,552	802,671,461
1919	454,923,170	746,940,654
	$2,111,924,191	$3,465,340,469

The great excess in value of our imports from the United States places Canadian money at a discount in that country, and the money of that country at a premium in Canada. Thus a Canadian manufacturer, buying raw materials in the United States, at the present rate of exchange, is obliged to pay a sum about three per cent. higher than the sum which a United States manufacturer would pay for corresponding raw materials for manufacture in that country. A United States manufacturer buying his raw materials in Canada is able to pay about three per cent. more for those materials than the Canadian manufacturer can pay. To illustrate: A United States tanner to-day can buy calf skins in Canada at a price about two cents per pound higher than the Canadian tanner can pay, without the former being subject to disproportionate costs of manufacture. As a result, the United States tanner can secure the cream of this market in such raw hides. Many other countries are controlling exchange conditions by customs tariffs and rigid import restrictions. To this end the United Kingdom and Italy are maintaining rigid import restrictions against a long list of manufactured products of foreign countries. As to France, at a Cabinet meeting, May 13th, where certain changes were considered in the French export embargoes, the Cabinet Ministers made the following statement:

> "We are also working on a plan for the revision of the import restrictions, which should be tied up with the revision of the customs tariff in order to safeguard the interests of the national industries."

The United States Congress, by resolution of the Ways and Means Committee, House of Representatives, adopted May 22nd, 1919, decided to take up a general revision of the tariff this session. The Chairman of the committee stated that the Government's need for revenues, and the demoralized state of foreign trade, demand a readjustment of tariff rates. Members of the Governments of Australia and South Africa have stated recently that the customs tariffs of those countries will be revised in the near future, because as they would be able to import less, they must make more.

For these reasons your Committee could not but feel that in the demands of the Western grain growers this country was threatened with real and serious danger. From whatever point the situation was viewed, whether from that of preserving our national independence, or of maintaining and promoting our industrial development, or of safeguarding our wholesale and jobbing trade, or of securing relief from an adverse rate of exchange, the fiscal policy counselled by the grain growers seemed to offer nothing but destructive results. Moreover, it was completely at variance with the tariff policies of other industrial countries, in all of which there is a noticeable tendency toward higher duties and restrictions, rather than lower duties and freedom of trade. In the decision to institute a counter propaganda, for the purpose of disseminating these and similar views in opposition to the grain growers' proposals, your Committee fully concurred.

Preferential Tariffs

Canada was the first of all British countries to adopt the policy of establishing tariff preferences for imported British goods. For upwards of twenty-one years the Dominion of Canada has admitted products from most British countries at substantially lower tariff rates than apply against corresponding goods of foreign production, without, as a rule, receiving reciprocal treatment which would serve to assist the export of Canadian products to those same countries. For many years this Association has consistently urged and supported the policy of reciprocal preferential tariffs for Empire goods. When Canada first extended preferential tariff treatment to the United Kingdom, New South Wales (Australia), was also included. At a later date New South Wales extended a preference to the United Kingdom, but not to Canada. Consequently, Canada was forced to withdraw the preference she had given to New South Wales. At the present time Canada extends preferential tariff treatment to the following British countries in addition to the United Kingdom, viz.:

The British Colony of Bermuda.
The British Colonies commonly called the British West Indies, including the following:
The Bahamas.
Jamaica.
Turks and Caicos Islands.
The Leeward Islands (Antigua, St. Christopher-Nevis, Dominica, Montserrat and the Virgin Islands).
The Windward Islands (Grenada, St. Vincent and St. Lucia).
Barbados.
Trinidad and Tobago.
British Guiana.
British India.
Ceylon.
Straits Settlements.

New Zealand.
Cape of Good Hope.
Natal.
Orange River Colony.
Transvaal.
Southern Rhodesia.
Swaziland.
Basutoland.
Bechuanaland Protectorate.
Northern Rhodesia.
Nyasaland Protectorate.
Uganda Protectorate.
East Africa Protectorate.
Protectorate of Northern Nigeria.
Colony and Protectorate of Southern Nigeria.
Gold Coast.
Sierra Leone.
Gambia.
Somaliland Protectorate.
Federated Malay States.
British North Borneo.
Sarawak.
Brunei.
Mauritius and Dependencies thereof.
Seychelles.
St. Helena.
Ascension.
Friendly or Tonga Islands.
Fiji.
Falkland Islands.
British Honduras.

Moreover, Canada extends to all the above countries a wide preference of substantially one-third, whereas, of these countries, only New Zealand reciprocates by giving Canadian products a corresponding preference. The only other countries which give a preference to Canadian products are South Africa, which gives a preference of three per cent., and Trinidad, British Guiana, Barbados, St. Lucia, St. Vincent, Antigua, St. Kitts, Dominica, and Montserrat, which give a preference ranging from two to about three per cent. on a limited list of dutiable commodities.

Preferential Tariffs

The United Kingdom has definitely committed herself to the principle of promoting the establishment of preferential tariffs within the Empire. The Honourable Austin Chamberlain, Chancellor of the Exchequer, in his recent budget, announced tariff reductions in favor of the products of the Overseas British Dominions, amounting to one-sixth off on foodstuffs and one-third off on manufactures. Except as regards tea, these tariff preferences take effect on the first of September, 1919. And there is considerable probability that the United Kingdom's dutiable schedules will be extended by adding to the dutiable list a variety of manufactured goods which are now on the free list. As regards Australia, there is good ground for belief that favorable action will result within a few months.

The carrying out of the preferential tariff principle throughout the Empire would leave to each British country complete control of its own customs tariff. It would bring the British Empire into line with the policies followed by other countries possessing overseas dominions. By means of such a policy the United States practically monopolizes trade with Alaska, Hawaii, the Philippines, Porto Rico, and the recently acquired Danish West Indies. In Cuba, too, United States' commodities enjoy a tariff preference ranging from one-fifth to two-fifths lower than the rates of duty on corresponding products entering Cuba from all other countries. That policy, too, has been and is to-day the policy of France and other great trading nations possessing overseas dominions. The Government representatives from Australia and New Zealand, whilst visiting in Great Britain, have exerted themselves very strongly on behalf of imperial preferences.

Your Committee believe that the adoption of substantial tariff preferences amongst British countries, corresponding to the preferences provided in the tariff of Canada, will effectually strengthen, consolidate and develop not merely the Empire as a whole but each constituent part thereof, and, by making representations to those in authority, they have done what they could to speed this great imperial project toward the goal of realization.

Standard Invoice Form

The Federation of British Industries state that they held an informal meeting with the Dominion Prime Ministers, and afterwards had a further meeting with the High Commissioners of New Zealand and Canada, and the legal advisors of Australia, for the purpose of seeing if a standard invoice form could be adopted. Afterwards, the Federation of British Industries referred the draft of a proposed standard form to this Association for suggestions. Your Committee found that the method of appraising imports for the assessment of customs duty in the various British countries differs widely.

In the United Kingdom the value for duty is the fair price



J. R. K. BRISTOL
Manager, Tariff Department, C.M.A.

of the goods, including freight, insurance and other charges, laid down at the United Kingdom port of entry. In South Africa the value for duty is the fair market value at the point of origin of the shipment, plus freight, insurance and other charges to the port of exit. In New Zealand the value for duty is the fair market value at the point of origin of the shipment, plus ten per cent. In Australia the value for duty is the fair market value at the point of origin of the shipment, plus freight thence to the port of exit and ten per cent. added to the whole. In Canada the value for duty is the fair market value at the point whence the goods begin their continuous journey consigned to the importer in Canada, provided that the cash discount shall not exceed two and one-half per cent.

Therefore, your Committee suggested to the Federation of British Industries that the method of appraising imports for

the assessment of duty in the various British countries should be studied, with the view to seeing if they could not be brought more closely into harmony, before adopting a standard invoice form.

War Measures Restrictions

The embargoes placed upon the exportation of various commodities by the Government of the United States after that country entered the war were reported at the last Annual Meeting. After the Annual Meeting, however, the effect of these embargoes, which had been steadily increasing, became most oppressive to Canadian industry. The United States, anticipating a long war and evidently desirous of conserving its resources, took these steps in order to ensure that there would be sufficient materials, available, first, for the prosecution of the war, and, secondly, for its own industries. Things came to such a pass that a number of Canadian industries were in danger of being completely crippled through inability to buy their raw materials from the United States. Information available was collected, which showed how seriously these embargoes were affecting our industries, and the same was laid before the Government, with a request that negotiations might be entered into with the United States' Government with a view to lessening these restrictions where possible, without affecting progress in the war. The Canadian Government took the necessary action, and through the efforts of the Canada War Trade Board many of these restrictions were lightened sufficiently to enable Canadian manufacturers to secure necessary raw materials.

After the armistice was signed, European countries retained their rigid restrictions against the importation of goods from other countries. These restrictions were so severe that they stopped importations and goods could only be imported by special government license, which was most difficult to obtain. Your Committee urged the Canada War Trade Board to endeavor to secure the removal of the import restrictions imposed by Great Britain against Canada, so that normal conditions of trade might be restored.

The case of Canadian exporters was laid before the British Government by the Prime Minister and his colleagues, who were then in England, and their efforts were ably seconded by Mr. Lloyd Harris, Chairman of the Canadian Mission in London, who was indefatigable in presenting the case on behalf of Canadian exporters. Eventually, the British Government lifted its import restrictions from Canada and from the products of all other Overseas Dominions. Your Committee feel that the Association owes a debt of gratitude to the Canada War Trade Board, to the Canadian Mission in Washington, and to the Canadian Mission in London, for their efforts in securing relief from such trade restrictions as were operating to the detriment of Canadian industry, and also for their successful work in bringing to Canada substantial orders for Canadian products.

Exports

Your Committee are strongly impressed by the absolute necessity for increasing the exports of this country. During the year ending March 31st, 1914, the total Canadian exports amounted to $431,588,439, of which $57,443,452 represented the value of manufactured goods. The high water mark of our yearly exports during the war reached the enormous total of $1,540,027,788, of which $636,602,516 represented manufactured goods. The increase, of course, was directly due to the war, and consisted almost entirely of articles needed in the strain of war by the belligerents in Europe. Normally, the great bulk of this export trade would disappear. The question then arises, how are we to pay our debts?

The national debt has risen from $544,391,368 in 1914, to $2,691,160,698 now. The estimates tabled in Parliament by the Minister of Finance represent a proposed expenditure this year of $438,000,000, exclusive of supplementary estimates not yet presented to Parliament. As we do not wish to adopt the unsound method of borrowing to pay our debt interest, it is imperative that the wealth of the country should be augmented by the natural method of increasing export trade. Finance for a country is very similar to finance for an individual. If a man is in debt he must live frugally, save money, work incessantly to produce something of value, and sell it. Canada must do the same. We must eliminate waste, cut down luxuries, encourage thrift, stimulate production, and sell more goods. The present demand for goods from Europe may be temporary, but while it lasts we should take the utmost advantage of it.

Gas and Gasoline Farm Tractors

In passing the first order-in-council regarding farm tractors, the Government took the position that, owing to war conditions, the stimulation of food production was temporarily more important than the maintenance of the Canadian tractor industry. The second order-in-council continues the concession, but lifts therefrom all provisions that would stamp it as temporary. The number of tractors entered free during the year covered by the first order was 13,641, valued at $13,056,013. The manufacture of these tractors in Canada would have provided profitable employment for one year for over six thousand men. As previously stated, reckoning only three to a family, this represents a city of 18,000 inhabitants lost to this country. And the foregoing does not include the mechanics and artisans who should have been employed in industries in Canada producing supplementary supplies required by a tractor industry. Before the first order-in-council was passed, Canadian tractor manufacturers had stocked materials at the then prevailing very high costs. These costs were very much higher than the costs on corresponding materials to United States' tractor manufacturers, whose finished tractors came into Canada free of all customs duties, for, where a Canadian manufacturer had to go to the United States for materials the prices for export to Canada were generally much higher than for "home" consumption in the United States.

Compensation for Depreciation

Even in respect to the prices paid by United States manufacturers on stock acquired to complete United States' Government contracts, the Government of that country has recognized the moral claims of manufacturers to compensation for depreciation in market value of stock on hand, owing to cancellation of such contracts after the conclusion of the armistice. The Canadian tractor manufacturers have been compelled to write off similar shrinkages in value of materials, owing to the unforeseen withdrawal from imported tractors of all customs protective laws. These shrinkages represent ruinous losses; and, in equity and justice, your Committee believe that these losses represent moral claims upon our Government equally as strong as those which are being entertained by the United States Government.

It is also a fact that the tractor manufacturers of Canada have to pay the full duties on imported materials, and do not qualify for drawback of 99 per cent. of the duties paid until after the tractors are completed. Even then there is very considerable cost through office work entailed in preparing the drawback claim and supporting evidence, after which there is much unavoidable delay in the customs reports thereon and necessary checking. These additional costs, the interest charges on duties so held on deposit by the Government, together with the one per cent. which the Government does not refund, represent a further heavy handicap upon Canadian manufacturers. Since the complete tractor made in the

United States enters this country free of any duty, the manufacturer of corresponding tractors in Canada is handicapped as outlined.

Your Committee also recall the fact that the Government purchased over one thousand tractors in the United States. In connection with that transaction, the Canadian tractor manufacturers stated that these tractors were sold to farmers at cost, exclusive of the service costs in educating and training men to run them; and that these service charges were paid for out of the general taxation of the Provinces. Corresponding service charges have to be carried in the overhead of Canadian tractor manufacturers; and, consequently, this Government competition worked a serious injustice to Canadian manufacturers, the bad effect of which extends down to the present time.

Your Committee recommend that the Government be urged to reconsider the tractor question, and to take the necessary steps to ensure the development of the Canadian tractor industry.

Customs Tariff Changes, Orders-in-Council and Rulings

There have been no tariff changes by Parliament since our Annual Meeting in Montreal last year, but notice of such changes as have been effected by orders-in-council or by customs rulings have always been sent promptly to members primarily interested. In addition, full announcements have appeared in INDUSTRIAL CANADA each month.

During the year the Tariff Department, in co-operation with members concerned, has handled successfully a very large number of appeals for relief from trade embargoes, of questions before the Department of Customs as to custom tariff interpretations, of questions as to value for duty of imports, of matters requiring new statistical classification, of custom seizure charges, the return of duties overpaid, and the settlement of drawback claims. Members are again reminded that the Manager of the Tariff Department is available to all members for consultation and assistance in respect to any customs matter, either foreign or domestic. In this connection it is gratifying to report that the facilities of the Tariff Department for advising on foreign tariff rates, invoice forms, etc., have been extensively used during the past few months.

All of which is respectfully submitted.

L. L. MCMURRAY, *Chairman.*

J. R. K. BRISTOL, *Manager, Tariff Department.*

J. E. WALSH, *General Manager.*

The motion to adopt the report of the Tariff Committee was made by Mr. L. L. McMurray, who read the report to the Convention. It was seconded by Mr. E. J. Davis, and duly carried.

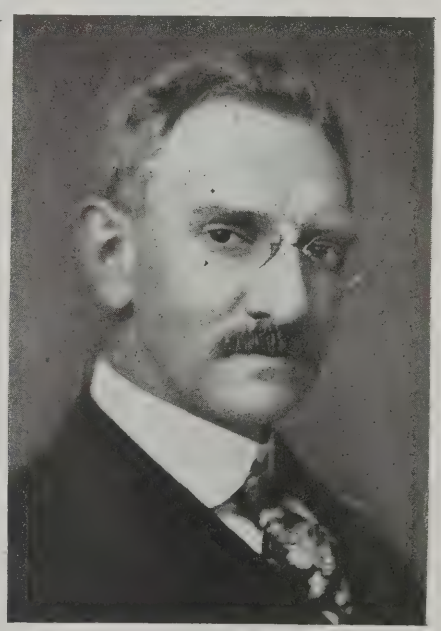
CHAIRMEN OF THE NEW STANDING COMMITTEES



J. F. MacKAY
Willys-Overland Limited, Toronto
Publicity Committee



E. HOLT GURNEY
Gurney, Foundry Co., Limited, Toronto
Commercial Intelligence



C. H. CARLISLE
Goodyear Tire & Rubber Goods Co., Toronto
Industrial Relations

International Press Photo.

Three new committees were authorized by the Annual Meeting this year, namely: The Publicity Committee; The Commercial Intelligence Committee; The Industrial Relations Committee.

The Publicity Committee will supervise all publications, articles or statements which are or may be issued by the authority of the Association. The Commercial Intelligence Committee will supervise the collection and distribution of information on commercial subjects which may be of interest to members. The Industrial Relations Committee will study the relations between employers and employees, and the various plans which have been or may be made to effect changes in these relations.

Before the above committees were created, their combined duties were performed by the Executive Committee, which, consequently, found that it had to deal with a great many details which did not come properly within its scope.

Canada's Opportunity in the Export Field*

Requirements of Great Britain and Many European Countries are Enormous —What has been Accomplished in Securing Orders—Criticism of Some of the Methods and Lack of Method of Certain Canadian Manufacturers

By LLOYD HARRIS
Chairman, Canadian Mission in London

MR. PRESIDENT and Gentlemen: I see that I am on the agenda to-day to address you on "Export Trade." This is a tremendous subject, and of course it is of vital interest to Canada at the present time. If I covered the subject as I would like to, I am afraid I would wear out your patience, so I am just going to deal with a few of the more important features of Export Trade and try to convey to you if possible a picture of the situation as I see it and as we have found it in Europe during the past seven months.

The importance of export trade to Canada at the present time cannot be overstated. In the condition in which we find ourselves in Canada after the great war effort which this country has made, it is vitally important that we should do everything possible to develop and increase the sale of Canadian products in foreign and other countries.

During the short period of four years, from 1914 until 1918, Canada's export trade had risen from $450,000,000 in round figures in 1914 to $1,536,000,000 in 1918. If this increase could be maintained and we could continue to sell abroad this enormous volume of Canadian products, our own situation and our own problems would be very easy of solution. However, this cannot be done without a tremendous effort and without a tremendous amount of education, and without a great deal of investigation and the attainment of a great deal of knowledge as to what export trade for Canada really means.

Canada's Ability to Produce

The ability of Canadian manufacturers and producers to manufacture and produce has been demonstrated during the war. On frequent occasions in Great Britain in addressing public gatherings there I have made the statement that, whereas in times past our Canadian representatives visiting Great Britain and talking about the great resources of Canada have always dwelt upon the fact that Canada was a tremendous agricultural country and was the granary of the Empire, to-day, after a brief period of four years, they can point out that Canada from being primarily an agricultural country has reached the position of being predominantly a manufacturing and industrial country.

In that same year of 1914 our exports of manufactured goods from Canada were only a paltry $57,000,000. In 1918 the exports of manufactured goods had risen to the enormous total of $636,000,000, a tremendous increase; that was of manufactured goods alone. Of course our agricultural products had increased also; nearly all of the exportable surplus of our various industries had shown large increases excepting in mines, fisheries and timber.

We demonstrated the fact during the war that we can manufacture in this country as economically and as efficiently as any other nation in the world. The efforts we made towards the production of munitions was one of the greatest accomplishments of the war by any country. The actual figures show that in the production of munitions we attained such efficiency that our costs of production of munitions were lower I think than in any country I know of with the possible exception of France. Our manufacturing costs were lower than in Great Britain and a very great deal lower than they were in the United States.

What of Ability to Sell?

I am proud of the fact that Canadians have demonstrated their ability to show that they can efficiently manufacture and compete in manufacturing with other countries of the world. I am not so clear as to our ability to sell. During the same period covered by the war one thing that strikes me is that we practically lost our selling organizations and to a great extent our selling ability. Things came too easy to us perhaps. Orders were placed with our Government departments; they were handed out to us and we were told to go ahead and devote all of our time to manufacturing. Consequently it was not necessary to devote any time to the organization of our selling staffs and to a study of selling methods. Now, the situation is entirely changed, and while we have the ability to produce we must get the ability to sell. This is the effort that everybody in Canada has got to devote his best attention to at the present time if we are going to successfully carry out the programme which I think every Canadian should get behind and do his utmost to carry out, namely, to maintain our large volume of exports.

To begin with, in considering the distribution and selling of our surplus products, the first thing that is necessary is to study our markets, to study the needs of those markets, and to find out what the people in these various countries, where we try or where we wish to sell our goods, desire and require. We must not lose sight of the fact that, because we produce certain articles in Canada which are suitable to the Canadian market and which the Canadian people want, those same articles will be accepted and taken by the people of other countries. Great Britain perhaps has failed to appreciate this situation as much as any nation in the past, and at the present time the whole discussion in Great Britain is toward trying to educate the British people to the importance of studying the markets, studying the requirements of those markets and of making the goods that are required for those markets.

Great Britain's Import Restrictions

When I got to Great Britain in November last I found a very curious condition of affairs. The whole of Great Britain, on account of their war effort, had practically been organized into departments for the controlling of every product that was produced or used in that country. The Government found it necessary to restrict importation of goods that were really not essential to the needs of the people. These organizations were still in existence, and as a result the effect of the import license restrictions at that time was that goods could not be imported into Great Britain, from the other Overseas Dominions. The situation was rather a

*An address delivered at the Annual Convention of the C.M.A., on the afternoon of Wednesday, June 11th, 1919.

curious one, but it had been simply brought about by evolution, because during the war, we in Canada had practically given up our commercial exports and so all of the exports that were taken from Canada, with very few exceptions, were Government purchases and purchases which were made for war requirements in Great Britain or by our allies. The result was that for the year 1919 the basis of importations which had been decided upon was the basis of importations of 1916 very largely. In some cases they took it back to 1913.

In 1916 Canada being at war was not exporting commercial products to any extent. The United States, however, which did not come into the war at the time we did, was exporting very largely to the British markets. Consequently they were being allowed percentages on importations for 1919 based on the imports of 1916. The same condition existed as to imports from France, from neutral countries and from all other countries. We had to take this matter up with the British Government and show them that the policy of the Government, while we stated we didn't think it was intentional, was to discriminate against Canada, and after properly placing the situation before the British Government we were then able to have all restrictions removed on our imports within the Empire into Great Britain. This means that Canada and the other Overseas Dominions could then enjoy a real Imperial preference in the markets of the United Kingdom, the first perhaps we had ever enjoyed.

Importance of British Markets

I don't think the people of Canada have since then realized the importance of the markets of the United Kingdom for our Canadian products. You have no idea of the conditions existing in that country to-day. The country is absolutely bare of everything, and they have not yet been able, and will not be able I think for some considerable time to come, to again get started in production, on account of the difficulty of securing raw materials. I don't know whether you know it or not, but Great Britain is absolutely dependent on outside countries for her supply of raw materials, and, in order to get her own industries operating to the maximum extent, it is necessary that they should purchase in the way of raw materials in value about half of what their exports were before the war. So that this market of Great Britain in raw materials alone is a tremendous market.

In addition to that there is not a single item that we manufacture in Canada and that is manufactured in Great Britain that is not in great demand in Great Britain at the present time. We have had representatives from Canada visit England. Some of them have come over there to buy. They have come in to see us. We have told them, you don't want to come over here and buy anything; you want to go out and sell something. And these men who have gone over to that country to buy actually have gone out and sold their Canadian products which they had no idea could be done at the present time. That market is still open. There is an enormous demand for almost everything that you can possibly think of. Canadian products have free entry into the market and, if you men don't go and get it, we certainly are not going to get it for you. I want to make that very clear right now.

Now, the object of my mission to Europe was to investigate the markets and investigate the conditions of those markets. In addition to opening up the markets of Great Britain, the other markets of the British Empire are wide open and here no Government credits are involved. All you have to do is go there and compete with the manufacturers of Great Britain; and as I have before stated, the manufacturers of Great Britain are not in a position and will not be for some time to take care of the demands of the other Overseas Dominions, so that those markets are all entirely open to Canadian producers.

I had an idea when I went over, and I think we all had, that the markets in France and Belgium would be very important at the present time for Canadian products. They do require enormous quantities of almost everything you can think of both in France and Belgium, but they have problems of their own. They have unemployment problems; they have their army which they are demobilizing and which they have to get back into civil life and to find employment for. In addition they have an enormous financial problem. The result is that they are not in a position to take down the bars and allow their people to buy freely from outside.

We have no conception of the condition of affairs in a country like France. France has an enormous debt. I am told



LLOYD HARRIS
Head of the Canadian Trade Mission

by French authorities that it will be necessary for that country to raise in revenue for the next few years four billion dollars a year in order to meet their expenditure, and they are very pessimistic about the ability of the country to do that. Before the war their gross taxation amounted to a billion dollars a year, and now they find themselves faced with the necessity of increasing that taxation by four times, or to four billion dollars. You can quite see this puts a tremendous burden on the people of that country, and the result is they are adopting a policy—and I can't quarrel with their policy because I think if we were in their position we would do the same thing—that they are going to endeavor as far as possible to look after their own reconstruction work and manufacture the things that are necessary for their own people and gradually get themselves into a position where they can meet the future with a great deal more confidence than they are able to look it in the face at the present time. Belgium is practically in the same position.

In investigating markets which would offer a chance for the sale of Canadian products we began looking further afield. Of course Russia is the greatest field perhaps in the world at the present time, but conditions are such that it

has been impossible up to the moment to do anything along the lines of opening up or developing trade in Russia. However, in other countries in south-eastern Europe the conditions appear to be more favorable, and I devoted a great deal of time to a study of the situation in Roumania, Serbia and Greece.

Roumania was a country before the war with about the same population as Canada and about the same debt. They have suffered cruelly on account of the war, but the basis of their wealth in Roumania is agriculture and petroleum. The people are an agricultural people and a peasant class; they do not manufacture anything for themselves to speak of and the result is that they have to buy all of their manufactured products. As an outcome of the Peace Conference the population of Roumania will probably be increased from about seven and one-half millions to fourteen or fifteen millions on account of their being allotted Transylvania, Bessarabia, and Bukowina, which will give them a population of that extent. This entire territory is very rich in agricultural resources, very rich in mineral resources, and in the Province of Transylvania large undeveloped resources in both coal and iron are there awaiting development, and in addition there are other very important and valuable natural resources in new Roumania which will be opened for development and expansion.

Credits to Roumania

The result of our investigation was that I recommended to our Government that we should consider favorably the granting of a credit to Roumania for the purchase of Canadian goods. This credit has been granted, and under the credit large orders have already been placed in Canada to meet the needs and requirements of the Roumanian people. What we are doing, however, will only be a drop in the bucket compared with the amount of materials and goods that Roumania will really require. They have enormous demands for practically everything needed in a country like Canada. They need a tremendous amount of new railway equipment and material; they need an enormous quantity of clothing, they need everything in the way of household utensils and everything that is needed in the ordinary course of living, besides very large quantities of agricultural implements and agricultural hand tools—practically everything we make in Canada.

If it could be arranged that we could extend further credits to Roumania there is no limit to the amount of business we could secure from that country. But as to the question of Government credits, I am not altogether in sympathy with them myself after having had the experience I have had. I think if we had all the money in Canada that they have in the United States, the proper thing to do would be to take this money and lend it to these countries for the purpose of purchasing to the fullest possible extent goods for these countries. But on account of our own burdens here, on account of the necessity of our finding all the money possible that we can to carry our own load, I think it would be much better for us to devise ways and means and schemes of trying to get at this trade by arranging other methods of credit, and this is going to get us back, if we are going to do it successfully, to the old method of Indian trade and barter. You must remember that every one of these countries in Europe at the present time is in such a position that they are not able to finance. They will be able to finance, however, in the next two or three years when conditions are settled, when they get their new areas arranged, when they get their new populations ascertained and when they begin again to get on their feet and can begin exporting.

In the case of Roumania, I think, next year will see them on an exporting basis again, so that the conditions in that country should clear up very rapidly, and I should think within the next three or four years, conditions will be absolutely sound in a country like Roumania.

Opportunities in Greece

In Greece there are great opportunites offering for Canadian products. Greece is in an exceptionally sound condition as compared with most of the other countries in Europe at the present time. Its finances have not suffered as those of other countries have. The Greeks have perhaps the ablest man at the head of their Government, Mr. Venizelos, of any country in Europe. He is a remarkable man; he has done a tremendous amount for Greece and he has ambitions to make Greece one of the greatest countries of the smaller nations in Europe, and I think if he lives for the next ten or fifteen years he will accomplish that.

We have many negotiations on with Greece at the present time; they are going to require an enormous amount of stuff and it will depend entirely on whether or not we are able to meet the prices and deliveries and quality of goods in competition with other countries as to whether or not we will get it. They are so keen on doing business with Canada, we will get every preference that can possibly be granted by the Greeks, and if we are able to give them what they want and require, they will take everything that we can supply.

The credit we have arranged with Greece is of a two-fold nature. It is a $25,000,000 credit, but $5,000,000 of it is set aside for the purpose of assisting the Greek merchants to buy the staple merchandise they require for distribution amongst the people of the country. This $5,000,000 will be used in that way and the arrangement is that, of all the purchases that they make, 40 per cent. will be paid in cash and the balance will be paid in six, nine and twelve months' treasury bills. When the goods shipped from Canada reach Greece they will be delivered to the merchants and they will then take up the bills as the goods are delivered, so that the $5,000,000 practically will amount to a revolving credit to cover the next year or so until conditions are got in such shape that the merchants will be able to deal direct with our Canadian people.

The Problem of Shipping

One of the greatest difficulties we have had, as you I think will realize, is the difficulty in the way of getting shipping, ocean tonnage, to carry Canadian products away from Canada. In this country we have provided ourselves with railway facilities to get products from one part of the country to the other easily, but when it comes to moving those goods away from Canada to other countries we practically have nothing, and we have to depend upon the ocean tonnage of other countries. We have been altogether too dependent in the past upon the British mercantile marine, and the British mercantile marine is going to be kept, and is at the present time being kept busy in looking after the Allied requirements, and the result is we are having a very great deal of difficulty in moving the goods that are actually being sold in Great Britain from Canada to that country.

In connection with Greece I found they were desirous of arranging for the supply of their wheat. The staple article of food in Greece is bread. I discussed the matter with Mr. Venizelos one day and told him that the importance of feeding their people with the very best food available was such, he ought to consider the fact that if he wanted to get the



Some of the Officials and Members Attending the Annual Meeting

Front row (left to right)—G. P. Ruikbie, Transportation Dept., Head Office; H. Dalton, Secretary, Pacific Division, Vancouver; W. P. Hughes, Secretary, Quebec Division, Montreal; F. W. Stewart, Cluett Peabody & Co., Montreal; T. P. Howard, Phœnix Bridge & Iron Works, Montreal (President); A. K. Cameron, Metal Shingle & Siding Co., Montreal; W. J. Bulman, Bulman Bros., Limited, Winnipeg, (Past President); J. E. Walsh, General Manager; J. A. McMahon, Union Drawn Steel Co., Ltd., Hamilton; H. E. Waterman, Secretary, Hamilton Branch, Hamilton; H. O. Kerr, Kerr Engine Co., Limited, Walkerville.

Back row—S. B. Brown, Assistant Manager, Transportation Department; ————————; T. F. Monypenny, Imperial Varnish Co., Ltd., Toronto; F. R. Whittall, A. R. Whittall, Can. Co., Limited, Montreal; W. C Coulter, Booth-Coulter Copper & Brass Co., Limited, Toronto; J. C. Watson, Lieut. Wallace Watson, and G. Johnson, of John Watson & Son, of Montreal, Limited.

best bread in the world he ought to use Manitoba wheat. He thought this matter over for a few days and he came back at me and said he quite agreed with the proposal I had made and he was prepared to enter into a contract with Canada to supply them with their entire requirements of wheat for the next twelve months. We then arranged a contract under which he wanted us to take care of the movement of this wheat from Canadian ports to Greece; and, not having any boats in my pockets or up my sleeve or anywhere else that I could find, I told him that we would have to think the matter over and see what arrangement could be made to take care of the movement of this traffic. Finally, I found that the Supreme Economical Council—the food section of it—had about 75,000 tons of Greek shipping which they were using in conveying food supplies for the various allied countries in Europe, and we arranged with the Council that, in the event of Greece releasing them from any responsibility of feeding them, they would release this 75,000 tons of shipping. So that happily we were able to make an arrangement with the Greek Government whereby they not only buy this wheat in Canada, but they take the responsibility of carrying the wheat from Canada to Greece. This means there will be about 25,000 tons of Greek shipping coming into Canadian ports every month for the next twelve months, and in addition to carrying wheat that will provide the necessary transportation for any goods that you gentlemen or that we may sell in Greece from Canada. So that we were able to get over this particular difficulty in this way.

Now I said a few minutes ago we had to get back to the old system of trade and barter. I have had a negotiation recently which will illustrate how this can be done. Personally, I am anxious to get all these trading matters and the carrying on of actual business out of the hands and out of the control of Governments. The only way to do this business right, and the only proper procedure to follow, is to force business back as quickly as possible into natural trade channels and force the people who have goods to sell to do business with the people who want those goods, and get them together and let them go on and carry out their own business arrangements and business relations. The organization which I have got together in London has I think been of enormous advantage to the people of Canada and will continue to be of enormous advantage to them, only my idea is that we cannot do for you and we will not do for you what you ought to be doing for yourselves. If the effort is not worth while to go out and get this business, then the business itself is not worth while.

I have had a proposal from the Russian Provisional Government in south-eastern Europe, over which General Denkin presides. They want an enormous quantity of stuff. They have not got any money to pay for their stuff, but they have an enormous amount of goods and materials of one kind and another. I am just going to read you a list of the materials they have and which they are ready to swap for Canadian goods, and you will see from this list that quite a considerable quantity of these materials can be used in Canada and are needed in Canada, while those that cannot be used in Canada can be easily marketed in other sections of the world where there is a ready market for these materials.

The quantities here are in poods. A pood equals 36 pounds:

Hides, 100,000 poods; that would be 3,600,000 pounds.
Potash, 200,000 poods.
Tobacco, 500,000 poods.
Cement, 1,000,000 poods.
Wool (varying quality), 200,000 poods.
Sausage casings, 20,000 poods.
Dried blood, 20,000 poods.
Pig bristles, 10,000 poods.
Liquorice root, 10,000 poods.
Oak staves, 200,000 poods.
Horse hair, 60,000 poods.
Sheepskins, 100,000 poods.
Cattle, 20,000 head.

Benzine, 10,000,000 poods.
Fruit oil, 5,000,000 poods.
Lubricating oil, 1,000,000 poods.
Axle grease, 100,000 poods.
Alcohol, 45,000 gallons.
Iron ore, 50,000,000 poods.
Wine, 1,000,000 bottles.
Champagne, 100,000 bottles.
Manganese ore, 10,000,000 poods.

Will I tell you what they want? They want 88,000,000 yards of cotton textiles and woolen cloth for men's and women's clothing. Does anybody think that the textile industry of Canada could turn out 88,000,000 yards of stuff?

They want 100,000 gross of cotton thread on spools; they want a million pairs of boots and shoes; they want rubber goods, goloshes, 1,500,000 pairs; heels for boots, 2,000,000 pairs; rubber sheeting, 7,000 yards; automobile tires complete with inner tubes, 3,000; bicycle tires, 2,000; inner tubes, 3,000; carriage tires, solid, 5,000; surgical and technical instruments, detailed specifications to follow, but quantity is equivalent to value at pre-war prices, of $500,000; agricultural machinery (Russian type) including self-binders, reapers, mowers and horse rakes, tractors, drill seeders and threshing machines; binder twine, 400,000 poods; medical supplies, detailed list to follow, cost at pre-war prices $220,000; miscellaneous carpenters' and blacksmiths' tools of all kinds; belting, lathes of various kinds, amounting in quantity to 2,500 lathes; tool steel, zinc, lead and tin, alloys, paints of various kinds, enamelled kitchen ware, kitchen utensils, including 10,000 sausage grinders, scythes, pitchforks, saws of various kinds, lifting jacks, steel rope, steel wire; office furnishings, including typewriters, pens, pencils, paper, stamps, etc., value at pre-war prices, $2,000,000; railway equipment (a separate specification is in course of preparation which will be a tremendous list).

Business Must Be Organized

You see what a varied list that is. It covers a tremendous number of our industries and practically all those we could supply in part. Of course the quantities are so large, in some cases it would be absolutely impossible for us to carry the thing through in toto.

What is to be done on a proposition of that kind is that the proper kind of an organization has got to be got together and the people here who can supply these goods have got to get in touch and form their own organization with the people who want the goods on the other side, and set up the necessary machinery to look after the gathering together of the goods, the shipment of them, the delivery of them in Black Sea ports, and in return to collect from the Black Sea ports the materials which they are ready and willing and anxious to give in exchange for the goods we can supply from Canada.

I am just mentioning that, because if we are going to go after this thing; if we ever showed resourcefulness in Canada in the past, we have got to show it at the present time, if we are going to take the fullest possible advantage of the situation that actually exists to-day.

Now I have just dwelt very briefly upon the possibilities of the development of Canadian export trade. The one thing that has impressed itself upon my mind and upon the minds of my whole organization in London is the fact that we in Canada are so totally unprepared and unfamiliar and uneducated in the question of export trade. We set up our organization in London, and if I do say it myself, we have got a pretty live organization there. I see quite a number present here who have been in our offices frequently in London. We have got a very live organization and we are anxious and willing to give every possible assistance to every Canadian who comes over there, and we do everything we possibly can for them, with the exception of actually going out and getting orders for them and handing them over to them on a silver platter.

A Word of Criticism

This is going to be critical for a minute or two, because I think we want to have this talk perfectly frank. Did you ever send out a man to do business for you without a catalogue or without any information, without prices or without anything? When we opened up in London, I don't think there were more than 15 or 20 Canadian firms that had even sent out catalogues of their products. We had no prices and, with the exception of very few cases, there were no representatives there of Canadian industries with whom we could get in touch to get the necessary information to answer the enquiries we were beginning to get immediately on our arrival. You cannot make us feel badly by overdoing us with catalogues and prices and descriptions and every information you possibly have about the goods you have to sell. When we have enquiries we will turn these over to the proper parties.

When I went over to Great Britain I asked the companies in Canada, who were strong enough financially, to send representatives over to Europe, to send such representatives with full authority to act, and with full knowledge of the capacity, prices, deliveries, etc., and with samples, where possible, of the goods that were produced by their respective companies. All the companies were not able to do this as individual companies, but group companies coming over sent a representative representing a group of industries. I might say that almost immediately after my arrival there, a representative of a group of one of our important Canadian industries was right on the ground. He had followed me right over there. I refer to the woolen industry. They sent a very live man over there, a Mr. Carley, and I would like to say, if I had twelve or fifteen or twenty Carleys over there, I could do such an enormous thing for you people that it would simply raise your hair. Carley is a real live wire and a great Canadian and has done magnificent work. He had the information I wanted; he had his samples all in fine shape and they were beautiful samples; he had his prices and he was able to show and talk his goods and the quality of them. The result of that was that the woolen industry immediately benefitted by having him there, and I presume that the woolen industry is one of the industries of Canada at the present time that is fuller of business than any other industry in the country, and it was for the reason they had a live man on the job.

What Various Industries Did

Afterwards other industries followed suit. The clothing men came over and sent over live representatives; that being an affiliated or allied industry with the woolen industry, the two simply worked together and I think they are filled with business. The cotton men came along, not grouped, but as individuals, and this is interesting at the present time, the cotton industry being looked upon as one of the key industries of Great Britain. What have the cotton people done? They have found they are producing cottons in Montreal at the present time cheaper than they are in Manchester and that they are able to compete not only with Great Britain but with the United States on their finished cottons, and they have got a large volume of business.

The paint and varnish industries came over. Mr. Ramsay came over. All of these men that came over I think got a

great deal more than they ever expected they would get. But, conditions over there are such and the demand is such at the present time, that you men who are sitting back here thinking there is no use going into the British market, where no Government credits are necessary, if you went over there and made a thorough investigation of the market, would be tremendously surprised.

The Boot and Shoe Industry

The boot and shoe industry is one capable of tremendous development in this country. There are about 250 boot and shoe manufacturers in the country, but they have not been able to get together. If that industry was taken hold of and properly organized and the right man or men sent over there, there is no question in the world but what the industry could have an enormous development and a tremendous export trade could be done in boots and shoes from Canada. The quality of the boots and shoes made in Canada, I am told by those who have examined samples of our Canadian boots and shoes, is as fine as anything that has been offered over there, and the prices are more favorable. The boot and shoe industry, before they go into that market and get business, have got to study the designs necessary and make the boots and shoes the people want. Because we make boots and shoes for the Canadian people is no reason why those boots and shoes are saleable and will be taken by the people over there. They don't want them at all. You have got to go to work and find out what these European countries want in the way of designs and styles of boots and shoes and supply them with what they require.

I just have a few memoranda here that were made up by some of my people in our office just to show you why we were unable to close and deal with enquiries that were coming to us on boots and shoes. We cabled Ottawa on February 17th for prices, and prices commenced to arrive about the end of March and continued to do so during April. Before sufficient information, prices and samples were received, however, the order that we were going to get had been placed, consequently we were unable to deal with that particular item.

Take cream separators; we sent over an enquiry for them, and under the conditions ruling in our Government credits, the Government desires that everybody manufacturing any particular article must have an opportunity of quoting. The way that works out is this: On cream separators we cabled for prices on the 14th March; prices began to arrive about the beginning of April and continued to do so until the middle of April; catalogues and illustrations, however, were not received until the end of April. A period of over two months elapsed from the time we requested quotations until sufficient information was obtained to enable us to place the matter intelligently before the people enquiring. By this time the business had been placed and we were unable to secure it.

Dairy Utensils

Take dairy utensils—you don't mind my mentioning your name, do you, Mr. Beatty? In this connection we would point out that Mr. M. J. Beatty, of Beatty Bros., Fergus, Ontario, has submitted a report to this Mission on his trip to the United Kingdom. From this report we have come to the conclusion that there is a wonderful opportunity for Canadian manufacturers of dairy utensils in England at the present time. Mr. Beatty points out that prices for this line of goods are three or four times as high as in Canada, and that practically nothing has been done in England during the war in getting out new styles. That is for the information of the dairy utensil manufacturers.

Bed-springs and mattress fillings—we began to get enquiries from the French Government and asked for quotations on these lines in February. Prices came dribbling in early in April to well on in May and samples and catalogues were not received until the middle of May.

Here are some general comments written by some of the members of my staff: "It has been brought to our notice by several firms here that Canadian manufacturers and others are very lax in not replying to correspondence and enquiries, and it is having the effect of creating an impression that Canada as a whole is not looking for business or making much effort to get it. You are well aware how small trifles of this kind create a false idea as the people in the U.S. are very particular about prompt replies to enquiries and furthermore carry on a regular follow-up course of correspondence. Not only has it a bad effect in creating an impression of slackness, but it is also causing some of the importers here to make strong representations to the Government to remove the restrictions from other countries that are not within the Empire.

"At the present moment Canada is, as you are well aware, particularly favored in this regard as compared with the United States, but if the representations of the importers are sufficiently strong and insistent, the Government will be forced to allow certain commodities to be brought in here on a par with Canada because these commodities cannot be procured, or apparently so, within the Dominion.

Some General Comments

"Particular reference is made to all classes of wooden goods such as clothes pins, dowels, broom handles, etc. Also complaints are made relative to lumbermen not even replying to correspondence. Even if they have not got the stocks on hand, or do not deal in the commodities they are asked about, surely it would be a simple matter for them to write a note to the English firm enquiring and explain the situation to them.

"A representative of an English house advised me the other day that he had been waiting on samples on certain items from Canada for the past five years. Every letter he received from the Canadian producer advises him that the samples are 'coming by the next mail.'"

Here is another one: "The British Overseas Trade Department operating under the British Board of Trade are doing everything possible to co-operate with us and we have been in close touch with them. They have at very great expense, and which involved a very great deal of work, prepared lists of importing houses and buyers of merchandise in European countries, and have offered that these lists would be supplied upon request from our office or to the manufacturers in Canada direct. An instance was brought forward, however, to show that information of this kind supplied the Canadian manufacturers is sometimes divulged to export houses in the United States. In the particular case which he mentioned a certain Canadian firm had requested a list of the buying houses in Marseilles, France. This had been forwarded, and to the surprise of the Overseas Trade Department the information had been acknowledged by an export commission house in New York City. Such export commission houses will no doubt use this information to assist their American clients."

That is not the way to play the game. We are trying to play the game with the British and make it an import proposition. Our friends on the south are doing everything possible to develop their trade and we are doing everything

possible to develop our trade, and we can do this thing and do it right, but they are not giving us any information from over there, and why should we hand them information that we have from over here?

Now, we sent out enquiries about different articles through the Canadian Trade Commission at Ottawa, and in some cases we have had cables direct from manufacturers in Canada here. Here is one instance: "Anxious get order, ascertain price we have to meet and cable quick so we can answer Ottawa on your enquiry." If a man has got stuff to sell surely to God he ought to have a price on it. Some of our people just want to get all the traffic will warrant.

We sent out an enquiry for three thousand tons of sugar to be delivered to a certain European country within twelve months. We get an answer back: "Canada can supply three thousand tons of sugar within twelve months. What price offering?" How do we know what price they are offering? They are not offering any prices; they are asking us for prices. We can't go out and ask them what their price is.

Here is another one. I won't mention the group, but a group of industries got together and formed a special company, and sent their representative over to Great Britain, and, by the way, this representative has got all the business that this particular group can do for the next twelve months, but somebody in the group evidently wasn't satisfied that the other fellows would play fair, so they sent their own representative to Great Britain in advance of the representative who was sent over by the group, and they have quoted firms in England lower prices than those which were authorized by the representative of the group. What do you know about that?

How Business is Lost

We got an enquiry for an article, cabled over about it and I got a very chesty cable back quoting prices and so on, and winding up, the last clause of the reply was "Offer subject to acceptance at once." I put in a quotation to the Government which made the enquiry in due course and two or three weeks after I got word from them that the Canadian price was too high. I cabled out to Canada to this effect and got the answer back: "Would like to know the quotation received from such and such a country in order that they may meet this competition." The business was gone.

Those are just a few. I thought perhaps I could bring the thing to a focus and get it pictured on your mind better by just quoting a few of the things that are happening every day in our office and the position we are in on the thing. We are trying to do everything possible to help you; we are working nights, days and Sundays, and you know that John Younge, whom you all know so favorably—John wanted to come out here and just have an opportunity of talking to you men himself. I am going to let John come out next Christmas and perhaps he will hand you a good Christmas box if he can get it all together. Our lot is not a bed of roses over there. We have a tremendous lot of problems and a tremendous lot of difficulties.

Now, another matter that I was asked to take up is the question of trade marks, patents, etc., and this is a matter which, as you get into export and foreign trade, you will find is of very great importance. The British manufacturers who have engaged in trade in the past have had a tremendous amount of trouble with the Germans on account of legislation not having been considered sufficiently important and having been put on the statute books. One thing we want to do in starting in on our foreign trade is to establish our own Canadian trade marks and our own trade mark design particularly of "Canada," and one of the things we have got to guard against will be to see that everything that goes out of this country with the trade mark "Canada" on it is up to a standard of quality, which will not only sell that stuff, but build up for the product a permanent market. So that it is very important that this question of trade marks should be early considered, and I think we should co-operate with those in Great Britain who are working on this same thing.

Question Surrounded with Difficulties

Now, I am trying to get over a lot of ground in a very short time, and if I am wearying you I will sit down in a minute. You see that this whole question of export trade is surrounded, as I before stated, with an enormous number of difficulties. However, the situation at the present time is that the reputation of Canada has been established throughout Europe and throughout the world because of the part that we have taken in the great war. The men that we have sent out from Canada in the Overseas Forces have made a reputation for this country which is higher than anything I know of. The reputation now belongs to Canada, and the continuing to keep that reputation depends entirely upon the rest of us who have in our hands the future development of our industry and commerce. Our boys who have gone out have left us a tremendous asset, and the people of Europe appreciate what the Canadian soldiers have done, and they appreciate also the fact that Canada went into this war not under any compulsion at all but for the purpose, as they think, of relieving them of the iron heel of Prussianism and despotism under which they have been living so many years. They know we have nothing to gain in the matter; we have no territorial ambitions, we have nothing to look forward to except to establish friendly trade relations with them and they are anxious and willing to meet us more than half way. So that the challenge is out now for the manufacturers and commercial interests of this country to maintain the reputation which has been so ably and magnificently built up by the men who have gone out to fight our battles for us. I have a great deal of confidence in Canadians, and I have a tremendous confidence in our ability to do anything that anybody else can do. The experience I had in Washington showed me we could tackle any job as well as our friends to the south, and the bigger the job the better we ought to do it. We did that in the war, and now I know that we can go ahead and carry out this magnificent programme which is so necessary to the future of our own country.

The Exhibition at Athens

I have just two other things I want to mention. There is going to be an exhibition at Athens, in Greece, for a month commencing the 13th October next. This exhibition is going to be carried out under the auspices of the Federation of British Industries. It is too late for us here to take the matter up and have individual exhibits, but I have arranged with the Federation of British Industries that they will allow us the use of the entire centre court of the Azpion, one of the old temples of Greece, in which the Exhibition is to be held, and all we could do in the space we have there would be to get together a very attractive exhibit of Government goods, a very condensed exhibit perhaps of cereals, and I think the Canadian Pacific Railway Company would take part in the exhibition and send down there the very attractive exhibits that are at present being shown in Paris, but it will leave two spaces of about 50 feet long, and I would like the Canadian manufacturers to take in hand the preparation of a condensed exhibit of manufactured samples.

What we need in London at the present time more than anything else is an exhibit of that kind. It is not necessary in London to have every firm in the country send over an

exhibit and duplicate a whole lot of things, but if we only had in some place in London, in a small room not any larger than this, a very carefully prepared exhibit of samples of our manufactured goods, of all of our smaller goods, not the large things—we can show those by large photographs and other ways—but for instance if we had in the ground floor of British Columbia House, in which our offices are located and which are in a magnificent central position in London, just a condensed exhibit of that kind so that, when these people come in, we could simply take them out there and say, this is a sample of what we make in Canada, it would be of enormous advantage, and I think it would help us a thousand fold. That is the kind of exhibit I would like to get together for Greece.

I will discuss this matter with a small committee or with the president later on, but I wanted to just mention it to you to impress upon you the necessity of having something of that kind. I never felt so handicapped in all my life over there trying to be a commercial traveller for you men without a darned thing to show, not even a catalogue, and when I went down to Lyons Fair and saw the magnificent exhibit of those who had initiative enough to go to Lyons Fair, I was tremendously proud of what we can do in Canada. We can prepare a condensed exhibit of this kind which would be an enormous attraction to thousands of people that we could show the exhibit to and it would be a tremendous help.

The question of an exhibition train was up and I was cabled about it and I turned the thing down. I don't think that is what we want at all over there. You take an exhibition train that is got together at very great expense and it does not fill the bill in my opinion at all. And if the fellows go over on that train they have a fine joy ride and all that kind of thing, but for the purpose of actually doing business it does not do what I think it should do. But if we are going to continue the Canadian Mission in London—and I think the Government should continue some sort of an organization such as we have and keep it a real live organization, because after all, our trade matters are the most important matters we have to look after in Europe, and the British Government the same way; they are waking up to the fact that trade is really the most important thing to the British nation; we have got to have something to show and, if we had just such an exhibition as I am attempting to describe, I think you will all agree with me it would be of great assistance to all of us. We don't want any names of manufacturers on it but just to take samples of the goods we make here and put them all together, and use a lot of ingenuity and resourcefulness in building them up. Take some of our raw materials; for instance, take a bunch of asbestos and have above it the different articles made out of raw asbestos, and in the same way some of our other materials, and we could get together a tremendously attractive exhibit. There is no use putting a Canadian exhibit in a place like the Imperial Institute. We have fine exhibits of our minerals in the Canadian Institute but nobody goes to look at those for business reasons; a lot of mineralogists and scientists go there, but generally the place is dead, and we want to get our manufactured products and samples in some place that is actually alive. If it is anywhere around the Canadian Mission in London, I can assure you it will be in a good live spot.

Now, Mr. President, I think I have covered as much ground as is necessary, and I want to thank you for this opportunity of addressing the C.M.A., and I want to tell you all that, so far as we are concerned in London, we are ready to go ahead and devote a few more months to this work, but so far as I personally am concerned I also want to notify you I am not going to continue this all the rest of my life. I want to get through with this as soon as I can and get back into private life and look after things that are so urgently requiring my attention at the present time. I have been glad and have enjoyed thoroughly being of service to Canada. Now, I have not done this for the manufacturers of Canada alone; I have done this work that I have been doing for the whole people of Canada, and I have been glad to do it, and if I can go on and spend a few months longer and can do any real service by continuing I will be glad to do it. I thank you all gentlemen, for your very kind attention.

Amendments to the By-Laws

AT the Thursday morning session of the convention, the first order of business was the consideration of amendments to the by-laws. The General Secretary, Mr. J. T. Stirrett, was requested to go through the various amendments, explaining their nature and purpose,—

MR. STIRRETT: "In regard to circular number 192, this long list of changes is chiefly technical and is caused by the necessity of renumbering. There are four main changes suggested and all the others group themselves around these suggested changes and follow them automatically. The first change is for the creation of five divisions which has been referred to in the reports already read, and the setting up of the machinery for their operation. The second is the substitution of five vice-presidents, or one for each of the proposed divisions, instead of the present arrangement. The third deals with committees,—first the enlargement of the Executive Council by taking in the chairmen of the standing committees. Then the abolition of the advisory committee and the creation of three new standing committees, the Publishing Committee, the Industrial Relations Committee and the Commercial Intelligence Committee. The fourth chief change is a change in the by-law necessary to provide for the increase in membership fees."

The Secretary then read the proposed changes in the by-laws which were considered clause by clause and were each adopted. With reference to clause number 25 providing for increase in fees the President said: "Now is the time for increased fees. I don't believe there is any question that the members of this Association are ready to increase their fees." (The clause was carried unanimously with applause).

MR. PARSONS: "Mr. President, we have passed over these changes so rapidly this morning that perhaps we have not quite comprehended or fully comprehended the significance of them. I know that there is no explanation of them really needed. I suppose of course that this intelligent body of men cover the matter in their minds pretty fully, but while I am on my feet I would like to make a remark or two and that is along the lines of arranging for the divisions and the better working out of all our arrangements from a national point of view. We felt that those who were occupying the positions of chairmen of the different branches should have a little more of official recognition than they would have simply as chairmen. For instance, take my good friend Mr. Fisher here, who for years has acted as Chairman of the Maritime Provinces branch and who has given magnificent service to that Branch. It would be better as you will all agree to dignify him with the position of vice-president of the Association than simply Chairman of the Maritime Provinces Branch."

New President Elected; Mr. Bulman Thanked

Association Welcomes Its New Chief Executive and Renders a Tribute to Its Retiring President—Mr. Bulman Urges that the National Service being Rendered by the Association Should be Proclaimed—Voices Hopeful View of the Future

FOLLOWING the adoption of the amendments to the by-laws, the next order of business was, the election of officers, these being nominated by the Committee on Nominations and Resolutions. The complete list of officers and committees thus nominated and elected will be found on page 233. On being called to the chair the new president, Mr. T. P. Howard said:

"I thank you, gentlemen, for the honor you have conferred upon me and I thank you doubly for the reception you have given me. I don't look upon filling the chair vacated by Mr. Bulman as any sinecure; on the contrary I think I have got a very hard job. The presidents of the Association, as you look back, have all been very prominent men; they have all given up a great deal of time and have carried on the affairs of the Association, I think, in a wonderfully good and clever way. I can only say I will do my very best to meet with your approval, and if I get as good a reception at the end of the year as I got at the start I will be very well satisfied."



Past and Present

Messrs. W. J. Bulman, the retiring president, and T. P. Howard, his successor, face the camera man at the recent Toronto Convention

MR. HENDERSON (Windsor): "Before the other officers are read out I want to do something which I am sure will please you and possibly all the other members of the Association. No one who has not occupied the position of President of this great Association can realize the amount of labor which is involved and the amount of time which has to be spent in looking after the affairs of the Association. I thought the year 1914-15, possibly was one of the most serious times for any man at the head of this organization, but this last year has been equally if not more so. Fortunately we have had such men as our retiring President at the head of affairs. I know he is a somewhat bashful fellow, but really gentlemen, we have had a man who has given all his efforts for this organization. It is a great honor to be President of the Manufacturers' Association, but it entails a great responsibility, and I am sure you will all agree with me that in Mr. Bulman we have had the right man in the right place. (Applause). He has devoted a great deal of time and attention to the affairs of the Association, and I think that during his term of office,—although I can't find very much to criticise in the Association and in its organization,—yet I think that certain improvements have been made. I don't want to take up your time but I simply rise, Mr. President, to move a vote of thanks to our retiring President for the energy and wisdom he has displayed during his term of office."

MR. PARSONS: "Mr. President, I have very great pleasure in seconding the resolution or question moved by my friend, Mr. Henderson, and it is quite unnecessary to add anything to his splendid words in recognition of the capital services which Mr. Bulman has rendered this Association during the past year. I think I can speak rather feelingly of the responsibilities of the work of the Association. So far as honors are concerned I have always held it was the greatest honor that could fall to the lot of any business man in the Dominion of Canada to be elected President of the C.M.A. That honor carries with it tremendous responsibilities which have been undertaken fully and completely by Mr. Bulman. I am sure we are all particularly glad that the last year's tenure of office fell to the lot of a western man. It shows the national character of our Association; and now we have a man that, I suppose we will say, is from the east, although not so very far removed from us, and so from year to year, as we make our selection, it is a satisfaction for the Association to know that those who go out of office as well as those who come in are as well fitted to undertake the responsibility. I have much pleasure in seconding the motion."

MR. HOWARD: "Gentlemen, I am going to call for a standing vote and three cheers for our retiring President."

A standing vote and cheers were given for Mr. Bulman, followed by the singing of "For He's a Jolly Good Fellow."

Mr. Bulman: "Mr. Henderson, Mr. Parsons, and gentlemen: As they have told you, I am a bashful man and your expressions in regard to myself have somewhat overpowered me. I realize possibly more since filling the chair of this Association the national importance of the Association. I realise many things that I didn't realise before I was so closely in touch with the operations of the Association, and

I believe that the Association is possibly the most necessary body in Canada at this time. We have with us in the West preachers and agitators who get up and tell the working men of that country that they should form one big union because the manufacturers have one big union. I think, gentlemen, that if the laboring men knew what this Association did, what its work was, they would realise that this Association in its efforts for the development of industry in Canada was as much for the working man as for the owner of the factory. (hear, hear).

"We are in no sense a union as they understand a union, but I think that as time goes on and labor, real labor, in Canada understands this Association, they will look upon it as the best friend they have in the country. We leave bargaining between capital and labor to the employers' associations and other organizations, and the efforts of this Association in a broad way are for the development of industry in Canada, and, if the development of industry in Canada does not mean more jobs, more wages and improvement in their conditions, then we have not succeeded. I think, gentlemen, that as time goes on we should make clear to the whole public of Canada that we are performing not a selfish service but a national service, that we were endeavoring to develop that part of the commercial life of Canada affecting industry, not for our own profit but more as stewards of industry for the Dominion of Canada, in the hope of building a nation here.

"We in the west are overpowered by agricultural thought; a lot of their propaganda and work is of the most selfish character, and I think members of this Association can do a great national service if they will make their efforts of national value rather than of selfish and personal interest. We cannot develop industry in Canada without protecting it in all its phases. Labor may think some of our actions are opposed to them; really in essence they are in their best interests. The same way with the tariff; it is in the best interests of Canada as a whole. We take the position we do because we so believe, and I think the slurs and attacks upon the Manufacturers' Association are simply made in ignorance of the Association. (Hear, hear). We should be commended and we should be the most popular body in Canada, and we will be, I am quite certain, when we have men who will make clear to the public of Canada, just what this Association is doing every day. If the public knew what this Association was attempting to do through its officers and its daily work, we would get the recognition for the service we do that we are entitled to.

"I, in the west, have preached that doctrine and, while I have been in a territory afflicted by all kinds of trouble and that seems to be the source of all kinds of agitation and development of late, yet I believe, when this labor trouble in Winnipeg is over, when the budget is passed, in a few years you will find the sentiment of the country changed. There is a big portion of the community, a large number of the farming community, who are not behind the Grain Growers in their propaganda. We have many times had gatherings of men who make their livelihood on the land, who repudiate the Grain Growers, the political association, and if these men were given a voice, if they had an organized voice, I think the menace of that agitation would be merely a sectional one and not entitled to the title 'Western movement.' It is not a western movement; it is a class movement, and I think that class movements whether it be labor or agriculture or manufacture or industrial will not succeed in Canada."

Resolutions Passed by the Convention

A Broad Field Covered by the Resolutions Committee in its Pronouncements on Various Questions Affecting Canadian Industry

PROBLEMS of labor and the tariff bulked largely in the series of resolutions which were presented to the convention by the Committee on Nominations and Resolutions, but a wide field of industrial activity was covered as well. Following are the resolutions as drafted and presented to the meeting:

Industrial Relations

WHEREAS, there should be a close association between employers and employees, whether labour is organized or unorganized, and

WHEREAS, co-operation would go far to establish the complete identity of interest between employers and employees and stabilize society, and

WHEREAS, this Association throughout all its history has realized that the interests of employers and employees are inseparable in the industrial development of Canada, and, consequently, has always endeavored to serve the best interests of employees as well as employers,

THEREFORE, BE IT RESOLVED, that the Canadian Manufacturers' Association in Annual Meeting assembled on June 12th, 1919, in Toronto, cordially welcomes the appointment of a Royal Commission on Industrial Relations, and pledges its co-operation and support to the Dominion Government in its timely efforts to secure a more complete knowledge of industrial conditions and better relations between employers and employees.

Punishment of Revolutionaries

WHEREAS, the peace and happiness of the people depend upon the maintenance of law and order, and

WHEREAS, the people of Canada are united in their determination to retain a type of government which is founded upon the principles underlying British constitutional liberty, and

WHEREAS, it has been the theory and practice of British peoples that changes in either the form of government or the constitution of society should be evolved gradually by lawful methods rather than by intrigue and intimidation with revolutionary intent,

BE IT THEREFORE RESOLVED, that the Canadian Manufacturers' Association in Annual Meeting assembled in Toronto, on June 12th, 1919, record its opinion that all those persons who attempt to undermine the existing form of government in Canada and the substitution of any other form of government should be summarily punished, and that if they are aliens they should be immediately deported.

Strikes of Civic Employees

WHEREAS, constant and adequate police, fire, water and other protection are indispensable wherever people live in close proximity, and

WHEREAS, grave dangers to life and property, and injury to the public welfare immediately result from any interference with the continuity and adequacy of this protection, and

WHEREAS, on several occasions in Canada certain civic employees have forsaken in a body the performance of their duties, and

WHEREAS such action cannot be justified in any circumstances,

BE IT THEREFORE RESOLVED, that the Canadian Manufacturers' Association, in Annual Meeting assembled in Toronto, on June 12th, 1919, ask the Dominion Government to enact legislation necessary to prevent strikes among civic employees, while at the same time making ample provisions for the redress of grievances and the hearing of complaints.

Labor Legislation

WHEREAS, the peace treaty will contain certain clauses in reference to international labour conditions, and

WHEREAS, Canadian industry must compete with the industry of other countries,

BE IT THEREFORE RESOLVED, that the Canadian Manufacturers' Association in Annual Meeting assembled in Toronto on June 12th, 1919, record its opinion that legislation which would place Canadian industry at a disadvantage in international competition should not be enacted until such legislation becomes effective in the chief industrial countries of the world.

Tariff Commission

WHEREAS, demands are made at frequent intervals by various sections of the Canadian people for radical changes in the Canadian Customs Tariff, and

WHEREAS, such demands prevent the determination of the settled policy that is necessary for the development of industry and trade, and cause depression in business, unemployment and imperil invested capital, and

WHEREAS, it is of vital importance that all industry should have reasonable assurance of stable conditions which will not be adversely and suddenly disturbed by unexpected and imperfectly considered tariff legislation,

THEREFORE, BE IT RESOLVED, that the Canadian Manufacturers' Association in Annual Meeting assembled in Toronto, on June 12th, 1919, respectfully urge the Dominion Government to appoint a permanent tariff board, acting in an advisory capacity to the Government, which will make a scientific study of the Canadian Customs Tariff and the tariffs of other countries with whose products Canadian producers are forced to compete, familiarize itself with costs of production at home and abroad, investigate the nature and probable national effect of all requests for tariff changes, and endeavor to frame a tariff that will serve the best interest of Canada, and thus assure the harmonious and all-round development of the country.

Imperial Preferential Tariffs

WHEREAS, Canada was the pioneer amongst British countries in providing customs tariff preferences for imports of British products, and

WHEREAS, the policy of customs preferences, designed to develop and consolidate Imperial ties of sentiment and trade, is now finding favor with other British countries and is being advocated by them, and

WHEREAS, the British tariff preferences provided by the Dominion of Canada are more extensive than the preferences provided in the fiscal policy of any other British country,

BE IT RESOLVED, that the Canadian Manufacturers' Association in Annual Meeting assembled in Toronto on June 12th, 1919, earnestly petition the Dominion Government to exercise its influence to hasten the adoption throughout the Empire of substantial customs preferences for Empire products, corresponding to the preferences now provided in the customs tariff of Canada.

Tractor Industry

WHEREAS, the removal of the tariff on certain farm tractors has practically destroyed the Canadian tractor industry and given to the United States employment in a rapidly expanding industry which at the present rate of consumption would support 18,000 Canadian citizens, and

WHEREAS, it is impossible to build up a Canadian tractor industry in the face of unrestricted competition with the United States,

BE IT THEREFORE RESOLVED, that the Dominion Government be urged to enact legislation which will restore to Canada the tractor business transferred to the United States through the removal of the tariff, and permit the development of an industry suited to the economic needs of this country.

Government Ownership of Railways

WHEREAS, the Dominion Government has been compelled to take over and operate two transcontinental railway systems, and

WHEREAS, these systems are not yet paying the cost of operation, and deficits incurred by them must be borne by the tax paying public, and

WHEREAS, competition is absolutely necessary in order to secure proper and adequate service,

BE IT THEREFORE RESOLVED, that the Canadian Manufacturers' Association in Annual Meeting assembled in Toronto on June 12th, 1919, place itself on record as being opposed to any further acquisition or operation of railways by the Dominion Government.

Shipping

WHEREAS, the farmers and manufacturers of Canada will suffer great loss if adequate tonnage is not available during the coming autumn for the shipment of agricultural and industrial products to Europe, and

WHEREAS, the possibility of increasing our export trade is largely dependent upon the volume of available shipping,

BE IT THEREFORE RESOLVED, that the Canadian Manufacturers' Association in Annual Meeting assembled in Toronto on June 12th, 1919, endorse the policy of the Dominion Government to create a Canadian merchant marine, and further, that the Government be urged to take the necessary steps to build, purchase or lease sufficient ships to satisfy the demand for tonnage.

Export Trade

WHEREAS, the gross public debt of Canada has been multiplied by five during the war, and

WHEREAS, the balance of trade is against Canada and, therefore, in international trade Canadian money is at a heavy discount, and

WHEREAS, to increase our export trade is the most certain method of reducing our national debt and of restoring both our trade balance and exchange to normal conditions,

BE IT THEREFORE RESOLVED, that the Canadian Manufacturers' Association, in Annual Meeting assembled in Toronto, on June 12th, 1919, commend the Government for the steps it has taken to extend this country's export trade, and urge upon the Government the necessity of sustaining such action, and that it appeal to its own members to increase and consolidate their trade with other countries.

Technical Education

WHEREAS, the future of Canadian industry greatly depends upon the degree of skill attained by industrial employees, and

WHEREAS, our educational system has been deficient in providing the necessary facilities for acquiring such education,

BE IT THEREFORE RESOLVED, that the Canadian Manufacturers' Association in Annual Meeting assembled in Toronto, on June 12th, 1919, convey its gratitude to the Dominion Government for its wisdom in passing the Technical Education Act at the present Session, and further, that the Association urge upon the Provinces the necessity for availing themselves of the facilities provided by the Act with the least possible delay.

National Conference on Moral Education

WHEREAS, a National Conference on Moral Education in the schools in relation to Canadian citizenship will be held in Winnipeg, on October 20th, 21st and 22nd next, and

WHEREAS, this Conference is being called for the purpose of discussing the question of moral education and training for citizenship, and

WHEREAS, the Central Committee in charge of the preliminary organization is composed of men eminent in various departments of Canadian national life, and

WHEREAS, the said Committee have supervised the formation of forty local committees throughout Canada, thereby securing national support for its plans, and

WHEREAS, it is essential that in educational matters studies which contribute to the formation of character and high ideals of citizenship should be encouraged,

THEREFORE, BE IT RESOLVED, that the Canadian Manufacturers' Association, in Annual Meeting assembled in Toronto, on June 12th, 1919, pledge its support to the said Conference, declare its sympathy for the aims of those who have convened it, and ask its members to do anything which lies within their power to contribute to the success of so commendable an undertaking.

Commission of Conservation

WHEREAS, the Commission of Conservation has rendered invaluable service to Canada, and

WHEREAS, it is essential that the work of conserving our natural resources should be continued,

THEREFORE, BE IT RESOLVED, that the Canadian Manufacturers' Association, in Annual Meeting assembled in Toronto, June 12th, 1919, urge the Government to maintain the past efficiency of the Commission, to allow no limitation to the scope of its activities, and at the same time to retain the present non-partisan nature of the Commission.

Fire Loss in Canada

WHEREAS, the fire loss per capita is much greater in Canada than in any other country, and

WHEREAS, the fire loss in Canada is increasing rather than diminishing,

THEREFORE, BE IT RESOLVED, that the Canadian Manufacturers' Association, in Annual Meeting assembled in Toronto, on June 12th, 1919, urge the Dominion Government to appoint a Commission to investigate the causes contributing to our national fire loss, and to recommend measures to secure its reduction.

The Metric System

BE IT RESOLVED, that the Canadian Manufacturers' Association, in Annual Meeting assembled in Toronto, on June 12th, 1919, endorse the following resolution which was passed by the National Association of Manufacturers of the United States, at their Annual Meeting held on May 20th, 1919, in New York;

"WHEREAS, national legislation is proposed and is being vigorously urged to substitute the Metric System for our present standards of weights and measures, and

WHEREAS, in the language of the 'British Committee on Commercial and Industrial Policy after the War,' which exhaustively investigated this proposal,

'We are not convinced that the metric system is upon the whole even theoretically superior to the British system, and we are satisfied that the practical objections to the proposed change are such as to decisively outweigh any advantages which are claimed for it.'

THEREFORE, BE IT RESOLVED, that we regard the present period of difficult readjustment from war to peace as a most untimely period in which to discuss or adopt a new system of weights and measures and thus add another to the many trying difficulties of this hour."

Discussion on the Various Resolutions

Resolutions on the Tractor Industry and on Government Ownership of Railways Brings Out Some Pointed Comments from Members

RESOLUTIONS presented by the Resolution Committee were for the most part carried without debate, but in the case of two or three of them, members rose to offer their comments. Following the introduction of the resolution with respect to the tractor industry, Mr. White of London said:

"I am interested, as you probably know, in farm machinery and the tractor business. When the statement was made that the industry is destroyed in Canada, I wish to state that, when the Order-in-Council in February, 1917, was passed admitting tractors from the United States free, it was passed as a war measure. We were promised it would be for one year only and we agreed as a war measure to the Order-in-Council. We visited Ottawa a number of times during last fall to know where we were at but could get no satisfaction, we were stood off from time to time, given no opportunity to purchase materials and in the meantime there were thousands of tractors brought in from the United States prior to February 7th when the Order-in-Council was passed, and last February 7th when it was continued.

"Prior to the original Order-in-Council we, as well as a number of other manufacturers, had a quantity of raw material ready to build gas tractors; in fact, we were building them and a number of other manufacturers as well. The raw material in our plant lies there as it came. We are purchasing tractors in the United States. We are using our organization through the west, through Saskatchewan, Manitoba and Alberta for distribution and sale of these tractors. We are using our field service forces, as demanded by the Governments of these provinces, and we are using our repair outfits, as is also demanded by the Governments of these provinces, to store and distribute repairs for United States tractors. We are employing to-day about 175 men, instead of 500 men, simply on account of the tractor legislation. The statement made that 18,000 of the population of Canada could be kept by the industry of tractors I think is absolutely correct, and if anything under the mark.

"I noticed in the paper this morning that Mr. Crerar in his remarks yesterday stated that, if Canadian manufacturers of machinery—he referred to farm machinery—could export some millions of farm implements to European and other countries and compete in the world's markets, why couldn't we manufacture machinery (referring particularly to tractors as I understood, although I may not have read it correctly,)—in Canada and compete in Canada with the foreign market? Mr. Crerar mentioned nothing of the drawbacks of duties on raw material entering into the construction of these tractors; he didn't mention,—probably it didn't occur to him,—that the tractor manufacturer is the final manufacturer and sells to the final consumer, that between him and the original raw material there are hundreds of intermediate industries that are affected and one half of them are concerned in the development of the natural resources of Canada. These natural resources have to be developed under some protection. If drawbacks of duty are allowed for export machinery and for the sale of tractors that come free into Canada, it means that we have to purchase this raw material in the United States and pay duty in order to get the drawback.

It cuts off every intermediate manufacturer almost back to the original raw material,—the ore and the tree.

"These matters I think should be very carefully considered by this Association. I don't wish to speak of it selfishly, but the tractor interests probably and the farm machinery interests are the least to be considered, but it is the intermediate manufacturing and industries who manufacture the raw materials that enter into the construction of these machines. I contend drawbacks of any kind are a very vicious policy and it cannot but injure any industry or the development of the natural resources of this country."

Government Ownership of Railways

On the resolution *re* government ownership of railways, Mr. Waddie of Hamilton said,—"I have just returned from Australia where the railways are operated by the Government; I was in New Zealand where the railways are operated by the Government, and I want to say I never saw such rotten service in all my life. I want to put myself on record as saying that, as the railways are handled there by the Government, going to buy a ticket is like going into the custom house to try to make a clearance, it takes about an hour. I had one experience where I had to go down to get a train for a certain place, and the train left at 8.15 in the morning and I was informed perfectly seriously by the clerk when I bought my ticket that I would have to be there at 7.15 or I wouldn't get my accommodation. I think from what I have seen of Government run railroads it is something appalling; don't, for heaven's sake, let us have it."

With the Canadian Trade Mission in Europe*

An Object Lesson for Canadians in War-Wrecked Europe—Canada will be Exactly What the People Make it and Unless they have the Vision to Make this Country What it Should be There will be Trouble for Some Time to Come

By LLOYD HARRIS
Head of the Canadian Trade Mission

MR. PRESIDENT and gentlemen: First of all I want to congratulate the members of the C.M.A. on their choice of the President for the coming year. The President you have selected, I might say from personal experience and actual knowledge, is a real fellow. Tom Howard is one of the real fellows in Canada, notwithstanding the fact we have got a lot of real fellows here; and I might also say that there is a real fellow sitting immediately on my right who has now passed from the chair of the C.M.A. having done such excellent service for you during the past year.

Strong Line of Presidents

You have been peculiarly fortunate in your choice of presidents of this Association. Perhaps the only good thing you missed was several years ago when I might have been in line. However, I went into politics instead, and a man to be a conscientious politician, as I felt, couldn't occupy the chairmanship or the presidency of the C.M.A. and sit in the House of Commons in Ottawa at the same time. Nothing of that kind has been known to occur in Canada. In fact, I sometimes think that it is almost impossible for a successful business man to find a seat in our Canadian House of Commons.

I think that this is all wrong. I, of course, am only expressing a personal opinion, but I think that perhaps if we had more of our successful Canadian business men in those seats of wisdom doing something to guide the destinies of this country, we would get over the bumps and over future problems a little easier and a little more intelligently than we are doing at the present time or are likely to do in the future. If there ever was need of business acumen, business intelligence and business direction, it is at the present time in the Government not only of Canada but of every country in the world. The problems that the Governments of the world have before them at the present time are distinctly business problems and unless we can bring our best trained business minds to bear on them,—men who have had the necessary business experience in handling these large problems,—I am very much afraid we are going to have a very hard time of it.

Of course, I always think that it is absolutely necessary in our House to be represented not by one class only, but that we should have every class properly and intelligently represented. The trouble has been in the past,—and this is the only criticism I have of the situation,—that we have had too many lawyers, but that is perhaps our own fault. We are the men who elect our representatives and after all is said and done we are responsible to the country for those who represent us in the House at Ottawa, so that we will have to take this lesson to ourselves individually.

Now, Mr. President, I devoted a great deal of time yesterday to giving a few thoughts on the export trade situation and I know you don't want to hear about business or anything to do with business to-night. I think I would like, if I may use the time at my disposal, which is going to be very short,—I've got my eye on the president's watch,—to give you a few of my personal experiences since I left Canada seven months ago.

When I left Canada in November last and arrived in England the latter part of November, I found a condition of affairs in Great Britain I little realized. I had not realized up to that time the effort and sacrifice that the people of the great old mother country had been making during the war, and I think we in this country have no conception, unless some of us have been over there, as to what the conditions were in that country and what sacrifices and efforts the people in the mother country have been making and going through. The conditions of living were such that coming in from the outside where I had had all I wanted to eat and all the fuel I wanted to keep me warm,—the conditions were such that I found it was almost impossible to successfully stay on this earth. The fuel situation was such that people in all parts of Great Britain had to be rationed on fuel, and the rationing was one third of the normal amount they had used when coal was in full supply two or three years previously. That is, if you had a house and had burned ten tons in a year two or three years previous, last winter you had three and one third tons, and from that had to be deducted the amount of electric light you used or gas or fuel. You could use all in electricity or all in gas or all in coal. The result was it was absolutely impossible to keep warm.

Then the food was such that it was impossible to keep properly nourished. The food was rationed. We thought we were making some sacrifice when we were placed under control as to our food supplies, but we know nothing about the conditions they had to live under in Great Britain at that time. We practically had no fresh meat. Once a week we could get a very small quantity; we had one ounce of butter a week per person, and that condition lasts until to-day. They would give us a small package of sugar, it was so thin in the thin envelope that you could slip it into your coat pocket and not know it was there, and that had to last you a week. You had no fats of any kind, and practically all you could get to eat was a ration of eggs, some fish and fowl in more liberal supplies. Those were the living conditions.

Didn't Praise Themselves

The people were under control of various kinds in respect to almost everything they did. However, I have often said to the British people on various occasions when I have had the pleasure of addressing them that the only criticism I had of them was that, while they were so generous in their praise of what every other nation and every other people were doing,—and they were especially so in connection with the efforts we had put forth in Canada,—they never talked enough about themselves, which is perhaps in my opinion their great fault.

[Mr. Harris here proceeded to detail his personal experiences while visiting Great Britain and the devastated areas in France and Belgium. He concluded as follows]:

It is impossible for anybody who has seen the devastation wrought during the war in the section of country we went

*Speech delivered at the annual banquet of the Canadian Manufacturers' Association. June 12, 1919.

through to describe what you see, but I would like every man in Canada, if it were possible, who was not over with the Overseas Forces, to have seen what we saw and I would like to have it leave the same impression on your minds as it left on ours. I don't think that any of us can possibly realize what this war really meant unless they have gone over those battlefields, visited scenes of those battles and seen the condition that the countries devastated have been left in.

Sad State of Poland

I only saw the Western Front in France. I have talked with Madame Paderewski, wife of President of the Polish Republic. She has described to me conditions existing in Poland at the present time, which are simply unbelievable. The people of that country are barely existing so far as food and clothing are concerned. They are in such a condition that the ravages of disease are spreading, and the whole thing is caused by lack of clothing and proper nourishment. These people in these countries are not restless, they are patient, and they are only waiting for an opportunity to be allowed to go to work. They have nothing against their organized scheme of Government; they are people that have practically been without a country for several generations and in some cases several centuries. They are now coming back into their own and waiting until they will again be a reborn nation, and waiting to be allowed to live in comfort and safety after all the years of oppression.

Roumania is practically in the same condition. Before leaving Roumania the Germans practically stripped her of everything. The consequence is the people have not sufficient food, they have not enough clothing and the privations and sufferings are such that we in Canada cannot possibly conceive of the situation. You have all read the papers as to what the conditions are in Russia.

I have been preaching and talking to the people I have met about Canada and I have said on very many occasions to these people who have lived under oppression for many years that perhaps Canada was the freest country under the sun; that we had a country of more equal opportunities than any in the World; that we had more settled conditions; that we had a land where anybody who came into it would enjoy freedom and liberty, and I come back here and what do I find? I find that there are conditions existing in Canada at the present time and that there are people living in Canada at the present moment, who, if allowed to live in Canada and if they had their own way, would make conditions in this country just the same as they are in Russia.

What About Canada?

I wonder what these people will think when they recall some of the things I have been telling them about Canada? I don't know,—I have been out of this country for the last two years; I have been out of Canada trying to do what I could for Canada and for the people of Canada; I have been glad to be able and to have the privilege of rendering a service of that kind,—I don't know what your conditions are here. I have not been back long enough to know just how things are. But there must be something wrong. I don't know whether the wrong is on the side of one class of people in this country or on the other, but one thing we have got to do is to, more than ever in our lives before, realize the responsibilities of our citizenship.

Canada is just exactly what we people in Canada make it and unless we have the vision to make this country what it can be made and have big views and broad views and take a big broad vision of the whole situation, we are going to be in trouble here for some time. All I want to say is that I have the greatest confidence and belief in our Canadian people in the biggest situation that the world has ever seen. Canada has taken a very worthy part and she did her efforts in a great big broad human way and there is nothing before us in the future that we cannot tackle with every confidence and that we cannot go out and clear up. This world is not going to be the same kind of a world that it has been before the war. We all want to realize that. It cannot be, but it is going to be exactly what we people, what we as individuals, have vision enough to make it.

Now, in my opinion Canada is no place for slackers. There is no more room here for the idle rich than there is for the idle poor. We have all got to be producers and workers, and why shouldn't we be producers and workers, because after all, work, in my opinion, is the panacea for all the ills? Whoever is unhappy or restless or discontented as long as they are busy? I never have been as long as I was busy. If I have ever got into a position where I didn't have anything to do for a short time, I was restless and discontented and getting myself into trouble every time.

Must Become Canadians

There is just one other thought that I have, Mr. President, and that is this, we have had many people come to find refuge and to find new homes in Canada who have come from countries where the living conditions were such that they had a great desire to escape from them. I think a great deal of the trouble and agitation and discontent in this country is from that class of people. I have made some enquiries and I have yet to be told by anyone who has been in close touch with the situation that native-born Canadians have been mixed up in any of these agitations to any great extent. We have a country we cannot hold alone for native-born Canadians, but I think what we ought to do and what we will have to do is to simply give notice to all the rest of the world, and to those in this country to whom we have given shelter and are willing to give them the opportunity of making for themselves a home and a living, that unless they will come into this country and accept the conditions and agree to live under the orderly conditions we as Canadians must compel them to live under, and unless they will become Canadians and be Canadians first, last and all the time, I think we just want to tell our Government to tell the people who are coming in here that the best thing they can do is to get out.

Preserve Canada's Reputation

Mr. President, I am not going to take up any more of your time. I have spoken longer than I intended. I just want to add this thought. I told you yesterday that Canada has the greatest reputation of any country in the world at the present time throughout Europe. That reputation has been made by our boys who have gone out and represented us on the battlefields of Europe. They have made such a reputation that the people of Europe and the people practically of other parts of the world are anxious to trade with us; they are willing to throw their trade towards us and into our hands. We have got the greatest trade mark that any nation ever had in that one word "Canada." You are custodians now of that trade mark, you members of the C.M.A., and you manufacturers, and if we go on and develop, which I think we will be able to do, an enormous trade in manufactured products in Canada, which I hope will be sent out to all parts of the world, whatever you do, do not ever allow anything to go out of this country with that trade mark "Canada" on it unless it is up to the standard and reputation and quality of the trade mark that has been created for us by our soldiers that have gone over to fight our battles.

The Causes of Labor Unrest in Canada*

The Natural Nervous Strain through which the Whole World has Passed—The Economic Pressure on All Classes of People—The Work of the Irresponsible Agitator—How these Causes are Working and how they May be Counteracted

By GEORGE B. NICHOLSON, M.P.
Chairman of High Cost of Living Committee

MR. President and gentlemen, when your Secretary, Mr. Murray, asked me in Ottawa about a week ago if I would come to Toronto and speak to the Canadian Manufacturers Association for a few minutes, I did not give him an immediate answer, for the reason I was not sure that I could say anything that might be of benefit to you, and I did not feel disposed to waste either your time or my own unless I thought I could say something that might be of some benefit and assistance, but after giving the matter a few hours' thought, I came to the conclusion that perhaps, out of the experience I have gained in one way and another, I might be able to say a word that would be helpful in the present crisis with which Canada is faced; and, as a foundation of what I wish to say in the few minutes at my disposal, I would just point out some of the responsibilities we must meet if we are going to do what the previous speaker, Mr. Lloyd Harris, has so well said—if we are going to keep inviolate the name "Canada" that has been made for us by our boys who have gone and died in France and Flanders.

How Our Debt Has Grown

First of all, let me say this—as you all know, I have no doubt, but it will bear repeating—in a financial way, our obligations directly out of the war are to-day equal to what our total financial obligations were in pre-war days; the interest on our war debt and the sum of money necessary to meet the pensions we will have to pay during this generation at least, are equal, if not greater than our total revenue of the expenditure of the Dominion of Canada for ordinary purposes in pre-war days, to say nothing of the necessary development if we are going to meet these obligations. We are faced with just this question, how are we going to do this? What are we going to do in order to enable us to meet these added obligations? We cannot do it by sitting down and trading jack-knives with each other; we must find some more practical way. The only way I know of and can suggest or think of, is that we will do just the same as the individual would do—because, after all, a country is a magnified individual—just the same as the individual would do that found himself in the same way, take stock of his resources and make up his mind how he could best develop those resources in order that he might meet his added obligations. That is the clear way to say it.

If we are going to go forward and develop these resources and meet these obligations and take the place in the world Canada should be destined to take, we cannot do it as a divided people; we must find some way to become united. At the present time we are faced with utter chaos, as has been intimated to you by the previous speaker, at a time when every single man of us should be bending every last energy we possess in an effort to get back into normal condition, in an effort to undertake the tremendous duties with which we and the rest of the world are faced.

The unrest that Mr. Harris has spoken of is of such a nature that no man can seriously contemplate going forward and doing anything with a reasonable expectation that he can accomplish it, because he does not know where he is going to land. I stated in a few remarks I made in Ottawa one night this week that there seems to have grown up amongst our people a feeling of resistance against anything in the nature of constituted authority or restraint; every one wants to go in his own direction; there is absolutely nothing in the way of unity, and that is manifested in a greater degree than any other way I know of in the minds of the working men.

Three Primary Causes

It is with regard to that phase of the question I am going to speak particularly, and may I, as a personal word, say that I feel my experience has been such that I can speak of the working man. I had the privilege of being an active member of a labor organization for fifteen years. I am still an out-of-service member of the same labor organization and closely in touch with their aspirations and what they are endeavoring to do; and I will say this to you, as a group of men employing working men, that unless we can find a basis upon which the working man and his employer can unite in a single effort to do the things that Canada must do in the development of all her manifold resources, we are going to end in utter and complete chaos.

The unrest is due, I would say, to three primary causes. First, there is the natural nervous strain through which the whole world has passed as the result of four years of war. We cannot get away from the fact we have got to face that situation. We have all been tuned up to a pitch almost to the breaking point for four and one-half years, working men, employers, men in all walks of life.

The Irresponsible Agitator

The next is the economic pressure on all classes of people, bearing perhaps heavier on the working man than on any other class. Then the third is the irresponsible agitator; and going over these three I will go backwards and I will take the irresponsible agitator first. I agree absolutely with what Mr. Harris said. The time has come, indeed it came long ago, when we Canadians as Canadians should have laid it down as an absolute principle that the man coming into our land, who did not want to become a Canadian, should not be permitted to stay here; the man who is not willing to subscribe to our institutions should not be permitted to stay here; the man who wants to pull down the structure of our society should not be permitted to stay here; and we have many of them; and we are responsible to a very considerable degree for the fact that they have had the influence they have had; we are responsible to-day for the fact that the loose-knit agitator has been the man who has occupied the centre of the stage while we have been willing to sit back with our arms folded and let him have his say. That again, possibly, is one of the weaknesses of the race from which we sprung. We are always ready to let the other fellow have his own way; it doesn't matter where it leads, and it has gone to a point, gentlemen, to-day, that

*Speech delivered at the annual banquet of the Canadian Manufacturers' Association, June 12, 1919.

is going to lead to disaster unless it is stopped. We have many evidences of it and I will deal briefly in a moment with the most manifest evidence we have yet had.

The next is the economic pressure due to the abnormal cost of living, the abnormal cost of everything a man has to use or consume.

There Must be Freedom

Now, there are all kinds of patent devices suggested for overcoming the high cost of living, and the high cost of all the products people have to consume. Suggestions are made that the Government should do this, that some organization should do that. We want some mechanical method for overcoming these things. I would just in that respect refer you, gentlemen, to the conditions that prevailed in the ancient empire of Rome in the years before the downfall of the empire of Rome, when the people got into such a condition that they were simply not free citizens but wards of a government; and if we are going to develop and maintain a virile Canadian citizenship, we must make up our minds the less control the Government exercises over the normal things of life the better it is going to be for Canada. Let me say this, for example, the thing that is bearing the most heavily on the ordinary man to-day is the food he is eating, and it is suggested in many respects there should be a fixed level struck at which the producers of food would sell their product. In my judgment the very moment you attempted to do that you would dry up the supply entirely. There must be freedom and we must find some other way—devise some other way. What is it? I am going to say this to you in all frankness again, I believe perhaps there is something wrong in an incidental way (because in the final analysis, it is only incidental), with our distribution system. It may be costing too much to get the necessities of life from the producer to the ultimate consumer; and, may I say just a word to the Canadian manufacturers, it may be, and I believe there are instances where it is costing too much to get the things you produce from the producer to the ultimate consumer, and right here the Canadian manufacturers have a direct responsibility themselves. The Canadian manufacturers are bearing the whole brunt, or a vary large part of the brunt of the odium that is cast on the people that are producing things, for the cost the people are paying for them. Whether they are responsible or not, I am not going to express an opinion, but it should be your business to see that the channels through which your goods pass in their course to the ultimate consumer are made as clear and free of obstruction as it is possible to make them. When I say that, I mean the distribution system within our own borders. There is a responsibility in that direction to make the distribution system as economical as it is possible to make it and to cut out artificial obstructions within our own borders if we can.

Must be Patient

Going back again to the third cause, the nerve strain through which we have passed, we can only overcome that by patience one with the other. We must exercise patience; we must give wise counsel if it is possible for us to give it to all classes in the community, in order that we may grow out of it. Take our returned soldiers, is it possible to expect that men who have passed through the hell these men have been in in the past four years, can come back and resume the positions they formerly occupied in a normal state of mind? It is not possible for those of us who remained at home in many cases to maintain that former frame of mind, and it is much less possible for these men; consequently we have got to be patient, exercise patience and do everything we possibly can to get them back into a normal state of productive activity as rapidly as they can be got, and at the came time with as little that will jar on their nervous system as it is possible for us to bring about.

Going on in a discursive manner perhaps, I want to come to the more direct question of the existing unrest amongst the working men and the relationship that does and has existed between the working man and his employer. It is manifest that conditions cannot go on as they are. It is impossible to produce anything in competition with the world and have the class war we have in Canada to-day. There is only one way by which we can compete in any line whatsoever, and that is we are each going to make up our mind to give the best that is in us to the things we take in hand to do. The man who is working in the shop, the man who owns the shop, the man who manages the shop must each be imbued with that idea or we are not going to get the best results. How are we going to bring about that condition? We must, as I say, in the first place eliminate the agitator entirely. We must then, if we can, cause the working man to feel he is getting a reasonable and fair return for the labor he gives. At the same time we must so organize our efforts that the man who is responsible for the management and putting his money in will also get a reasonable and fair return, and that there will be a reasonable chance that business is going to go on without interruption. The strikes that we are having, the constant interruptions—make it as I would say without uestion impossible for any development to take place. You can't open up new industries because you don't know where they are going to lead, all on account of this unrest and uncertainty. You do



J. S. McKINNON
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Elected First Vice-President, C.M.A., 1919-1920

not know whether your men are going to work ten hours a day this week and eight hours a day next week; you do not know what rate of wages you are going to pay because things are going around in a vicious circle. So that we must endeavor if we can to establish some uniform basis upon which industry can go forward; and in that regard we have got to take into our consideration what is being done in every other country in the world. Canada cannot establish a different standard from other countries and compete with other countries, no question as to that. Our working men have a right to the very best, the highest standard that working men can possibly get, but if they get up on to a pedestal above the working men of the rest of the world, the things they are creating as the result of their work cannot compete with the rest of the world. I may be a visionary in all these things, but I say to you this, that there must be a consistent effort to bring about a reasonable world standard, at least within the confines of that portion of the world with which we compete.

Employer and Employee

Coming down a little further to the actual relationships that exist between the workingman and his employer, I want, if I can, for just a few minutes to give you some of my own ideas with regard to the war that is on, so to speak, between certain elements and sections of what is called organized labor and the employers, and I will refer to the Winnipeg strike as the best illustration I can get and conditions that prevail there. First of all, let me say this as a member of a body of organized labor who has studied the question from every angle and aspect and has secured confidential information as to what has taken place in Winnipeg, the Winnipeg strike is not a strike at all in the accepted sense of the term. It is rebellion against constituted authority, and it is not only rebellion against constituted authority in so far as the state is concerned, it is rebellion against constituted authority within the ranks of organized labor itself. The effort, that Winnipeg was made the centre of, was not to establish the rights of organized labor, but to destroy organized labor as we have understood it in Western Canada and ultimately throughout the whole of Canada. There isn't any question about that. The question of collective bargaining that was interjected into it is simply an excuse and not a reason at all for the conditions that have prevailed in Winnipeg. It is simply as I say, an effort to destroy organized labor, and why? Because those who are responsible for that movement knew and they know now that the only way by which they could accomplish the purpose they had in mind, and that was the ultimate overthrow of constituted government in this country, was to first destroy recognized bodies of organized labor. Take that away from them and they had no other excuse; none whatever; and the thing that has saved the situation in Western Canada to-day, if you will let me say so, gentlemen, is the fact that organized labor itself in the main, has been able to see through the whole thing. They recognize now—large bodies of organized labor—just what these men have had in mind. I said, speaking to a group of men every single one of whom were members of organized labor, two weeks ago to-night, that the men at the head of that movement in Western Canada were not working men, they had never done an honest day's work in their lives, they were grafters, not the working men of this country, not the working men in any other country.

But, gentlemen, having said all that, I want to say to you that there is a place for organized labor, and I want to say also to you, that many of the employers in Canada are to a very large degree responsible for placing the club in the hands of these agitators that they have been able to use, because many employers in Canada have refused to recognize the good that they themselves could get out of organized labor properly constituted, and also the right that the working men had to get together in an organized body just the same as a group of employers has the right. I am saying this to you as a man who has seen the question from both sides, having had 15 years' experience as a leader in a body of organized labor, and 17 years' experience as an employer of a large body of men. Many employers have refused apparently to recognize the right of the working man to do just exactly what the employers have always been doing, a group of men combining together for mutual benefit of each, perfectly consistent with the whole social system with which we are surrounded.

Collective Bargaining

Now, then, what is my judgment with regard to how labor may be organized and how it should be recognized? And in that connection I am going to deal with what I believe is the most vexed question before the Canadian working man and employer, and that is the question of collective bargaining. It is a very catchy phrase, isn't it? How many men are there in the City of Toronto—working men or otherwise—who will define collective bargaining for you? Each will define it in his own way. There are groups of men in this country that do understand and that practise collective bargaining, and let me again say this, that the Winnipeg strike in every phase of it, had for its object destroying every foundation on which collective bargaining must rest if it is going to be successful. Collective bargaining rests on two principles, the first is the right of employees of a given employer to negotiate with that employer for the terms and conditions on which they will work and give that employer their labor. The second is the absolute inviolability of the contract they make with that employer. And when you say that, you immediately make manifest the fact that such a thing as a sympathetic strike is an utter impossibility if the foundation of collective bargaining is to remain. Why do I say that? If I make a contract with you I am going to do certain things on certain conditions, I expect you are going to carry it out if you have the moral honesty to do it, and you have a right to expect I will do the same. That is a contract between two men or groups of men if you will, but if John Jones and William Smith have a disagreement and I say to you because they can't come to terms I am going to abrogate the contract I have made with you, and refuse to recognize it, where is the basis upon which a contract can be made? It falls to the ground at once. You have no control or responsibility for what your neighbor does; I have none for what my neighbor does. Having said that, I do not mean for a moment that different bodies of organized labor may not become affiliated for mutual counsel just as this Canadian Manufacturers Association is drawn together here to-night for mutual counsel, just as the United Farmers of Ontario may be drawn together for mutual counsel, but being drawn together for united counsel and undertaking to say, because one of our number is going to refuse to recognize his moral obligations is an excuse for all the rest of us doing the same, cuts the foundation away from society at once, doesn't it? The weakness is this, gentlemen, in what is termed the ordinary organized crafts; and right here let me say to you again, the Canadian manufacturers may be able to do something to strengthen the position of organized

labor as it should be, and, in doing that, to strengthen their own position.

The only bodies in Canada that I know of that have been organized along consistent business lines are the railway organizations, and instead of being organized in a polyglot mass of different crafts within a given area, they are organized in one national craft, from one end of the country to the other. If you had a national bricklayers' union, a national carpenters' union, a national painters' union, a sheet metal workers' union and all the rest national, the particular craft from one end of this country to the other organized in one body, you would have a much stronger and stable body with which to deal. That body would have an opportunity for better leadership than it otherwise would have. They might, there is no objection that I can see to them being affiliated one with another, as the railway organizations, but there would be no obligation on the one part to enter into a sympathetic strike; they can give them their moral support and advice and counsel. When a manufacturer was dealing with the metal trades or sheet metal workers he would know he was dealing with men who knew the business possibly just as well as he did; he would know he was dealing with men that knew what was taking place in every other town and city in Canada, and in that degree the whole system would be stabilized, and when the sheet metal workers or the bricklayers went to make a contract with an employer they would not go to make a contract for bricklayers and painters or plasterers or anything else.

In Community Groups

The ordinary crafts are not organized in this way to-day as I understand it; I may be wrong; they are organized in community groups; the crafts in the city of Toronto are organized separately from the crafts in Montreal. It is true they are all affiliated with the Dominion Trades and Labor Council, but they have not got that continuity of organization that the railway organizations have. In that connection let me say this, because it has been stated by men who should know better, that the railway organizations do not make contracts as divorced organizations and they are pledged the one to support the other. Absolutely unfounded, any statement of that description. The locomotive engineers make their own contract with their employers; the locomotive firemen make theirs. It is true sometimes that these two bodies, on account of the way their works interlock the one with the other, do negotiate a joint contract, but they maintain absolutely the right that each separate organization signs its own contract and each separate organization takes to itself the right to open that contract according to the terms under which it is made whether the other group wishes to do so or not; and the railway company with whom they make that agreement has the same right. How does it work out? You have never heard of the employees of the Grand Trunk Railway going out on sympathetic strike because the Canadian Pacific didn't deal justly with its employees, or *vice versa*. Notwithstanding that fact, and in spite of the fact that in 35 years there have only been three small little eruptions in the form of a strike in the railway world in Canada, the position of every single one of these men has been improved more than 100 per cent., by mutual negotiation. Possibly they have gone too far, but whether they have or not, they have done that without a single break in the service. If that can be accomplished in connection with the transportation companies, why can't it be accomplished in connection with all the rest of the industries upon which this country is dependent?

What the Association Can Do

Now, I do not know whether this body can do anything or not, but I believe that possibly it can by lending its counsel to its own employees and making it known to its employees that it is willing to assist, if necessary, in the development of strong, stable, sound organizations with which it can deal; not taking the attitude that you are going to fight with them; not taking the attitude that the employee and employer are at the opposite poles, but because you do feel the interest of one is the interest of the other, because without one the other cannot live. We cannot continue to manufacture without having men to carry on the work; the employees cannot get service unless the men are willing to organize these things and put their capital into these things, and join with them in a mutual effort for the benefit of themselves and society as a whole. If the Canadian manufacturers can in any way assist in bringing about a more stable craft organization that will be working along safe and sane lines, they will be doing a good thing for themselves and every man in Canada, without any question. Every man, woman and child is dependent on stable conditions. Without them we are not going to be able to maintain what we had before and we are not going to meet our responsibilities.

I will repeat to you, gentlemen, what I repeated two weeks ago to-night. It would seem to me as though there is almost a determined, consistent effort to destroy what Mr. Harris has referred to as the freest country under the sun, to destroy democracy itself. The very home and cradle of pure democracy is here in Canada, and it is going to be destroyed if conditions go on as they are.

Our Responsibilities

Without any question we are going to have an upheaval such as has occurred in Russia, because that is what is aimed at. 427,000 of our boys went over to France and Flanders. What for? To maintain the freedom of the world and to protect the homes of Canada. 150,000 of these boys have come back more or less maimed and broken in body and mind. Some of them, 65,000 of them, will never come back. Have we any responsibility to these men? Have Canadians of every class any responsibility to these men? Are we going to let it be said that the country for which they died is going to develop into a state of revolution and destroy the institutions they died to save? That is what we are faced with, and, gentlemen, let me say here to-night with all the earnestness that I can, that unless the men who see these things as they actually are are willing to get out and make sacrifices and tell the people of this country what the conditions are and whither we are drifting, I would hesitate to even venture to say what might be in front of us within the next six months. If the men who are at the head of that Winnipeg strike, for instance—not the Winnipeg strike, but the Winnipeg revolution—get their way; if they are compromised with to-night in such a manner that the same thing will only break out somewhere else in worse form, then I say society in Canada is very much in danger, and I know whereof I speak.

I thank you very much, gentlemen, for the privilege of being here and addressing you. (Applause).

Industrial Relations—the Tariff Question*

The Desirability of Realizing Industrial Democracy—Can be Measurably Accomplished Without Resorting to State Socialism—Radical Changes in System of Federal Taxation Should be Viewed with Less Hostility

By W. C. GOOD

MR. PRESIDENT and Gentlemen of the Canadian Manufacturers Association,—Many years ago, an unknown Hebrew poet put the following words into the mouth of Job, then longing for death to end his afflictions,—

> "There the wicked cease from troubling;
> And the weary are at rest.
> There the prisoners are at ease together;
> They hear not the voice of the taskmaster.
> The small and the great are there,
> And the servant is free from his master."

And though the stately gloom of Sheol has been dissipated by Him who declared that a man's life consisteth not in the abundance of the things that he possesseth, and though we are to-day the heirs of all the ages, it seems difficult for us to weigh justly those differences of language, custom, wealth and worldly circumstance which often blind us to a common humanity. It needs the vision of the poet, or, a touch of the Divine insight, to penetrate the disguises and see the essential and the permanent. Very often it needs the angel of death to place things in their proper perspective, and to make us realize that the bodies of millionaire and pauper must finally rest under six feet of earth, and that their spirits will ultimately appear before the Creator, to be judged in accordance with the deeds done in the flesh.

I take it, therefore, gentlemen, that it is a duty we owe to ourselves, to try to forget that we are farmers, or manufacturers, or artisans, or teachers or preachers; and to try to look at some of our problems from the standpoint of our common humanity. And this duty is further enjoined upon us by reason of our common citizenship. Have we not all spilled blood and treasure in a war for liberty, humanity and democracy? Have not rich and poor stood shoulder to shoulder in the fight? And are we not all bound to exalt in our daily life as citizens the splendid ideals for which so many of our best and bravest have gladly given even life itself. I would, therefore, from this point of view, submit for your thoughtful consideration this evening certain questions which make an impressive demand upon our citizenship.

The Farmer's Viewpoint

The first question upon which I wish to speak is that of Industrial Relations,—the conflict between so-called "Capital" and "Labor." It may appear at first sight that a farmer has no right to make a pronouncement upon this matter. But I think you will see, on second thought, that farmers, being for the most part capitalists and laborers, are singularly fitted to appreciate both sides of the present conflict, and, insofar as they can, to act as mediators. I trust, therefore, that you will bear with me if I venture to discuss this matter with you.

In all production there are three factors recognisable: Land, Labor and Capital. By Land, I mean all natural resources whether of matter or energy, and by Labor, I mean all human effort, of body or mind, which is directed by the human will to the satisfaction of desire. By Capital, I mean all those products of labor applied to land which are not produced for direct consumption but as an aid to further production. Tools, buildings, machinery and soforth are *capital*, and are sometimes called by economists, *producer's goods* in contradistinction to *consumer's goods*. Money is capital only in a secondary and subordinate sense.

Now of these three factors,—Land, Labor and Capital, only two are primary factors, viz.—Land and Labor,—Land the passive factor and Labor the active factor. Capital is obviously a product of labor applied to land, and is therefore secondary. Obviously, too, the best results are obtainable only by harmonious co-operation between the various factors; and nowhere, I think, can this be seen better than in the case of the typical Canadian farmer. Access to the land is the first essential, conferring the opportunity to labor, and constituting an inalienable right. The farmer then straightway endeavors to become a capitalist, and labors long and hard in order to save. Savings are invested in improved buildings, machinery, fences, drains, etc., all of which greatly augment the efficiency of his labor. There is, thus, in his case, the primary, essential and perennial motive for saving, for thrift, for industry and for efficiency. And there is no friction in his case between capitalist and laborer, none even conceivable in his dual capacity.

Capitalistic System Disintegrating

Now any student of industrial history knows that a tremendous transformation was brought about during the 19th century, mainly through the application of Power and Science. Nearly every industry but that of agriculture suffered this transformation. Capital gradually fell into the hands of one class and there became separated a vast number of "wage earners," who had access neither to Land nor Capital. The capitalistic system arose in practically every industry which permitted of centralization and it is well to remember that this system is essentially quite a recent development. In fact, so far as world history goes, it is but of yesterday, and I desire to express my solemn conviction that this system is now in a state of rapid disintegration. It was always fundamentally unstable, and could not be expected to last. Like political autocracy or aristocracy, industrial autocracy cannot permanently exist. It contains within itself the seeds of decay and extinction. The democratic system is the only one that is vital, and if I have read history aright, I am as certain that industrial democracy will have to come, as I am of my own existence. How and when are, of course, largely matters of conjecture; but it seems to me that it would be the part of wisdom and patriotism for you gentlemen, representing in Canada largely the class currently known as capitalistic, to face the situation courageously and unselfishly and try to map out a course of action that will avoid great distress and disaster. Change is coming, and coming rapidly. Whether it be peaceable, constitutional, revolution or bloody revolution, will largely depend upon the strength and obstinacy of the forces of reaction; for you all know what will happen if capitalists sit on the safety valve.

I say, then, that Industrial Democracy is coming; must come. Is it not time that we began to think about the

*Speech delivered at the annual banquet of the Canadian Manufacturers' Association, June 12, 1919.

matter: what it involves and how it is going to be applied? What is implied in Democracy? A well known definition runs thus—"Government of the people, by the people and for the people." More concisely the French put it—"Liberty, Equality, Fraternity."

Liberty we all concede, theoretically if not practically. But we are not as ready to concede equality. The famous statement that "All men are created free and equal" is, by many, definitely and positively denied. May I suggest that this denial is based upon a total misunderstanding of the word equality. Equality does not mean similarity. There are all kinds of differences between men, but he would be a bold man to affirm that such differences involved corresponding inequalities. Life is life, because it is life, and in a sense all life is equal. Read, again, if you will, the anti-slavery literature of the last century, and the history of that terrible conflict which marked its political culmination. And what can we say of an industrial system in which, according to the late Chauncey Depew, there were seven men in the United States who could stop every train and every railroad and shut down every factory, because they controlled the capital? Such a system is certainly not democratic, and you know as well as I do that is cannot be tolerated. Is it not strange that concurrently with the growth of political democracy we have the growth of industrial autocracy? I venture to state further that our modern industrial system has dehumanized personal relationships, that industrial processes to-day largely destroy the joy of workmanship, and that the wage-earner has little inducement to take any interest in his employer's business. Speaking as one who is both laborer, and capitalist, I am convinced that the present factory system, capitalistic system or whatever you choose to call it, is thoroughly unsound, and that we shall not have any industrial peace until the whole business is completely renovated.

State Socialism Unnecessary

Just lately the Dominion Government has oppointed a Commission on Industrial Relations. In 1912, the United States Congress appointed a similar Commission which conducted a most exhaustive investigation during a period of some two years, and gave, as summarising the causes of industrial unrest, the following four main sources:—

1. Unjust distribution of wealth and income.
2. Unemployment and denial of an opportunity to earn a living.
3. Denial of justice in the creation, in the adjudication, and in the administration of the law.
4. Denial of the right and opportunity to form effective organizations.

Our own Commission will report shortly, and it will be interesting to see what their verdict is. But, be that as it may, it is surely time for us all, and especially for you men, to get some vision of the future and to interpret and apply the principle of democracy to modern industry, and especially to those industries where "Labor" and "Capital" so-called, are in conflict with one another. And I can see this advantage in our industrial disturbances that they may reveal the weaknesses of our present system before it is too late to remedy them.

I commend, then, to your most sympathetic consideration, the proposition of realizing industrial democracy: *Industry of the people, by the people and for the people.* I think this can be measurably accomplished without embarking very extensively upon a program of State Socialism for which, as an immediate policy, I have very little sympathy.

And now, with your permission, I venture to say something upon that bone of contention between farmers and manufacturers,—the tariff.

First, however, let me say that there is no reason why there should be any antagonism,—that is in the nature of the industries. In any natural evolution of industry, you find primary, secondary, tertiary, and so forth; represented, as it were, by a pyramid of which the base is the primary. Agriculture is the greatest of our primary industries; manufacturing, so-called, is perhaps, the greatest of our secondary industries. An enlargement of the base will involve a corresponding enlargement of the superstructure. It ought, therefore, to be the concern of all, and particularly of the secondary industries, to see to it that the normal expansion of the primary industries continues. Any undermining of the foundations will ultimately result in a collapse of the whole structure. Any fundamental injustice, as between the different industries, will render the whole edifice unstable, and then ruin is imminent.

Let me say in the second place, with reference to the relative earnings of Canadian Manufacturing and Canadian



—B. and C. Press Photo

G. M. MURRAY

Ottawa Representative, Canadian Manufacturers Association

farming that there is much need for light upon the subject. I made some investigations covering the years prior to the war. The Ontario Department of Agriculture has also made investigations concerning the farmers' earnings in several sections of Ontario during the last two years, which are obtainable in bulletin form. And the Dominion Bureau of Statistics has published figures from time to time in connection with the whole question. Nothing as yet is very satisfactory and it is, of course, impossible to go into the evidence to-night. Suffice it to say, however, that according to the best information I can get, the average earnings of Canadian manufacturing are vastly greater than those of Canadian Agriculture. I could cite some glaring cases, which have received press notice of late; but I will here make no comparisons of a personal nature. I desire only, here and now, to draw your attention to the dissatisfaction which such

disparity in earnings must create, and to express the conviction that only harm can come from such conditions.

As for the causes of any existing inequity in the earnings of our primary and secondary industries, the farmers believe that one great cause of the same is our fiscal policy, and they therefore advocate, and will continue to advocate, the reform of this fiscal policy not for any selfish purposes but in order to restore a balance that has been seriously upset. Time will not permit my going into details on this present occasion. I desire, however, to present one or two points of a general character.

Profitable or Unprofitable

First, then, let me say that we cannot properly measure the material well-being of any nation in terms of money. The recent fall in the purchasing power of the dollar should have made that truth abundantly clear. Material wealth must be measured in terms of commodities and services, and therefore the average real wages in any nation will depend upon the productivity of that nation—upon the amounts of various commodities and services which are available for distribution. Any policy, then, which diverts labor from an enterprise in which it is efficient to one in which it is less efficient reduces the national wealth and thus reduces the average real wage obtainable. For example, to take an extreme case, the diversion of labor from wheat growing or beef raising in Canada to orange culture could have only one effect—that of tremendously reducing our national productivity. And anything which so diverts labor from relatively profitable to relatively unprofitable enterprises is nationally impoverishing. Scarcity may be good enough for certain individuals, but the philosophy of scarcity will never be valid from the standpoint of the social welfare, any more than it would be good policy for a nation to destroy half its crop in order to secure better prices for the rest of it.

Now, according to the farmers' view of the situation, a protective tariff has these definite and inevitable results: (1) it diverts labor from industries which are self-supporting to those which are not; and (2) it creates an artificial scarcity by restricting exchange. It is indeed from our point of view based upon the false assumption that trade is competition instead of co-operation. The exchange of commodities and services following the division of labor and industrial specialization, is, according to all economists, one of the greatest means whereby workers co-operate for mutual advantage, and it is entirely erroneous to conceive of trade and commerce as a form of competition. Anything that hampers exchange hurts both parties, the seller and the buyer. Let me take a homely example from my own business. Suppose we have a good crop of potatoes in Ontario and they have a potato failure in New York State. Anything like an import duty into New York, anything that makes trade difficult, will have the effect of preventing me from selling my potatoes and preventing a prospective customer from buying them. This has happened more than once in the spring; my potatoes have been wasted, whereas families elsewhere have been deprived of a cheap and wholesome foodstuff. The effect of a tariff in such a case is to bring loss to both parties; just the same as if transportation were impossible. We farmers believe that plenty in one place should go to relieve scarcity in another; that trade should be as free as possible; that the improvement of all means of transportation is a blessing, and we hold, contrariwise, that all impediments to exchange are harmful. Of course, we admit that from the point of view of the selfish producer such impediments may be profitable. For example, the lucky possessor of potatoes in New York State, in the circumstances referred to, would find it to his self interest, to be protected against my competition from Ontario. But in such case, and in all such cases, the individual gains much less than the community loses. Our view is, therefore, that the operation of protective tariffs always brings more loss than gain to the communities concerned. Consider, gentlemen, how even your own business would be affected if the protective principle should be applied between East and West. Let us build up diversified industry East and West, in each Province, in each County, in each Township, in each City, on each farm. Follow the principle of protection to its logical conclusion and civilization disappears. Don't be worried about diversification: there will be plenty of it under the freest of trade. Variety of natural resources, of climate, of taste, together with proximity to markets will ensure quite enough diversification. The view that Free Trade for Canada will result in reducing this magnificent country to a nomadic pastoral condition is a fantastic dream of a disordered imagination. My own conviction is that if Canada had not adopted the protective system in 1878, our population at present would have been much greater than it is, and our manufactures in a much more flourishing condition. Unprovable, you say? Quite so, but so is the converse unprovable, and all arguments from history and economy are on our side. Is it not a fact worth noting that Political Economists are practically unanimous in opposition to protective tariffs? I do not ask you to bow to their authority, but it is at least presumable that they should know something of that to which they have given years of study, and I say again that the arguments in favor of Free Trade are unchallenged and unchallengeable.

Another fact seems to me of pressing importance from a national standpoint. Canada has now a tremendous foreign debt. Including everything both public and private, I should not be surprised if it was near five billion dollars. The Dominion Statistician, Mr. Coats, places it between four and five billions. If Canada is not to repudiate this debt and suffer all the humiliating and demoralising consequences of repudiation, we must pay both principal and interest, and the interest charges alone are staggering. How is this to be done? It must be paid in commodities or services. No subterfuge is possible. A domestic loan will simply postpone the evil day, will merely transfer money from one pocket to another. We must not allow ourselves to be fooled by any such suggestion. There is only one way of paying our foreign debt and that is by production. We must export to pay it.

What of Export Trade

Now I put this question to you manufacturers: What amount of export trade can you count on permanently? The munition business is done; we hope, for good. Before the war Canadian manufacturers were exporting not more than about 50 millions a year. Can they do more during the next ten years? There may be some business done in this line owing to the temporary dislocation of industrial life in Europe; but how long will you be able to export manufactured goods to Europe, and to what extent? Moreover, how good is their credit when credit must be taken? Further if Canadian manufacturers cannot compete with foreign manufacturers in the Canadian market how are they going to compete with them in their own home markets? Will you carry coals to Newcastle?

The Canadian farmer will be delighted if the Canadian manufacturer will help pay off our foreign debt; but he does not see how much can be expected in this direction unless, indeed, the Canadian manufacturer were to sell abroad at a loss, and recoup himself by charging exorbitant prices at home, as did the sugar manufacturers of Germany 20 years ago. Such a policy would scarcely conduce to domestic peace and harmony. From our point of view the only solution is to cut down the cost of production all round, both of farm produce and manufactured articles; and this we believe could be assisted very much by a radical change in our system of Federal taxation. Your employees are now complaining

bitterly of the high cost of living. So far as food products are concerned the outlook is worse than ever. Labor will not come to the land, and if you will not help the farmer to reduce his other costs of production you will be asked to pay higher and higher wages, which will only further aggravate the situation. And again, industrial warfare makes the situation still worse, by reducing efficiency and productivity and thus enhancing the cost of living still more.

It seems to me, gentlemen, that there are only two effective remedies in connection with the two great questions I have discussed with you to-night. You must be prepared to work out some system of co-operation in your several industries; you must try to realize industrial democracy, frankly, honestly, and unselfishly, and you must come to view with less hostility a radical change in our whole system of Federal Taxation. In these matters I speak not as a farmer, but as a citizen and I think I know whereof I speak. Farmers have ideals on which they will not compromise, but on questions of ways and means you will find them reasonable. A get-together policy is obligatory.

Now, gentlemen, let me close with a word of warning from history.

For thirty years Wm. Lloyd Garrison and a handful of enthusiasts appealed to the latent moral force of the people of the United States against human slavery. They were for years hounded, reviled and maltreated. But they persisted, and in time the movement they began gathered strength. In time it got into politics as such things must do. In time a great, and bloody, and most tragic war was waged to settle the issue. In the midst of this conflict President Lincoln spoke as follows in his second inaugural address;

The Wisdom of Lincoln

"Neither party expected for the war the magnitude or the duration which it has already attained. Neither anticipated that the cause of the conflict might cease when or even before, the conflict itself should cease. Each looked for an easier triumph and a result less fundamental and astounding. Both read the same Bible and pray to the same God. and each invokes His aid against the other. It may seem strange that any man should dare to ask a just God's assistance in wringing their bread from the sweat of other men's faces, but let us judge not that we be not judged. The prayer of both could not be answered. That of neither has been answered fully. The Almighty has His own purposes, "Woe unto the world because of offenses, for it must needs be that offenses come; but woe to that man by whom the offense cometh."

"If we shall suppose that American slavery is one of those offenses which in the providence of God must needs come, but which having continued through His appointed time He now wills to remove and that he now gives to both North and South this terrible war as the woe due to those by whom the offense came, shall we discern there any departure from those divine attributes which the believers in a living God always ascribe to Him? Fondly do we hope, fervently do we pray, that this mighty scourge of war may speedily pass away. Yet if God wills that it continue until all the wealth piled by the bondsman's two hundred and fifty years of unrequited toil shall be sunk, and until every drop of blood drawn with the lash shall be paid by another drawn with the sword, as was said three thousand years ago, so still it must be said that the judgments of the Lord are true and righteous altogether."

The application of these words to our present situation is not difficult to make, and let me hope that we may make it in the spirit of Lincoln; and " with malice toward none, with charity for all, with firmness in the right as God gives us to see the right," let us do all we can to achieve a just and permanent peace between hostile industrial classes.

Woollen Manufacturers Meet

Annual Meeting Canadian Woollen Manufacturers Association Held in Toronto Last Month

The annual meeting of the Canadian Woollen Manufacturers Association was held in the King Edward Hotel on Friday, 20th of June, 1919. Mr. Richard Thompson of the Hawthorn Mills, Carleton Place, presided.

Means by which the products of the woollen manufacturers can be standardized with a view to bringing prices to a minimum, to meet successfully competition in the efforts to be made to build up export business were fully discussed. There were present as guests: Dr. F. W. Merchant, Superintendent of Technical Training for Ontario; Dr. A. C. McKay, Toronto Technical School; J. M. McIntosh and H. Macdonald, of the C.M.A.



The "G. M."

Mr. Walsh falls a prey to the camera man just as he is about to embark on the expedition around Toronto Harbor

Dr. Merchant outlined the programme of Technical Eduction which the Government is undertaking, and what it is willing to do in connection with the textile industry. He asked that suggestions as to the best lines to be followed, be submitted to the department by the manufacturers. In accordance with this request, a committee was appointed to draft an outline of textile education.

A representative of Cooley & Marvin, Boston, manufacturers of special textile accounting systems, gave a short talk on the best methods of accounting for this particular industry.

Officers were elected—Mr. Richard Thompson being re-elected chairman, with Mr. Frederick H. Yapp, of Hamilton, secretary-treasurer.

The Industrial Development of the West*

National Unity to be Promoted by the Establishment of Industries in Western Canada—Both Parts of the Dominion will then have Something in Common—Plans to Develop the Industrial Resources of Alberta

By M. A. BROWN
Mayor of Medicine Hat
President of the Alberta Industrial Mission

MR. PRESIDENT and Gentlemen,—I appreciate very much the privilege and the honor which you have conferred upon my Association for this opportunity of saying a few words to the Canadian manufacturers at this your annual dinner. You have listened, I am sure, with very great pleasure and very keen interest, to the speakers of the evening, and I have listened with more than very great pleasure to the last speaker, and to the manner in which he presented his address and to the spirit which he has shown here to-night. In this hour of our national history, when the future is clouded with uncertainty and grave problems await solution, I shall not attempt to speak to-night in the usual after-dinner vein, but shall mingle my voice for a few moments in gravity with those who in Canada speak and who say at this hour of our national history that we must uphold in this country constitutional government. The right to govern is not the right of the anarchist or the soviet, but it is a sacred right given to the people in government by the will and wish of the people of Canada. We respect to-night, and more, Mr. Chairman, we honor and we sympathize with the worker and toiler and with the union that through constitutional and recognized methods seeks to improve the conditions of its members and seeks to find a better pay; but we challenge the right of any, be they of Anglo-Saxon birth or foreign extraction, to defy the laws of this country that have been enacted by the wish and by the will of the people of this country. And more than that, Mr. Chairman, let us say to-night, representing, as I am sure we do, the vast majority of the intelligent people of this country, let the members of this Association speak with no uncertain sound this evening to those who sit in constituted authority in this country, whether they be in the council chambers of our cities or within the walls of the provincial legislatures, or whether they sit to the right or to the left of the Speaker on Parliament Hill, let us say to them that those that will defy our law, that those who will disgrace our flag, that those in Winnipeg who will maltreat and who will attempt the life of a V.C. hero in the performance of his duty, that these must be brought to justice, and if aliens they be, they must be banished forever from the shores of this country.

Stable Fiscal Policy Needed

Now I come to speak to you to-night for a few moments regarding an industrial mission which has been started in Western Canada and in which I trust we will have the co-operation and support of the manufacturers not only here but throughout the whole of Canada.

During my short experience of some twelve years in the West, I have visited this Queen City of Toronto and many of the important centres of the East upon many occasions, but, Mr. Chairman, I never return to the West from the East without a stronger conviction that there is but one sane policy, but one secure foundation on which to build the future of this country, and that policy is a stable fiscal policy, and that foundation is one so well and broadly laid that the people of the West can unite with the people of the East in building upon it, and I take it they will in common serve the interests of every part of this Dominion.

Must be National Development

During the past fifty years the people of Canada have been divided upon many issues that have vitally affected the interests of the federated states of Canada, but I venture the assertion to-night that not within the past quarter of a century have the people of this country faced a period so filled with peril and with problems so difficult of solution, with a country divided against itself, with financial responsibilities so great and with a people less prepared to meet a most difficult situation. It is idle for the people of the East or the people of the West to say that in the past we have weathered the storms and that the future will care for itself. Mr. President, the problems that face us to-day will only be rightly solved when the people of the West unite with the people of the East in laying down a programme for the intelligent and scientific development of the great resources of this country, and thereby secure for ourselves economic independence. During four years of war we were fighting for principles, the political freedom of free states and the continuity of the political freedom of the British Empire and of this our country, and did we not well learn during that period of war that the political independence of any country was based to a large degree upon its economic independence? Did not you manufacturers of Eastern Canada learn by costly experience, because of the difficulties which you experienced in finding raw products, that after all Canada owes her economic independence to the United States, importing as we do such a very large percentage of our basic products? We import from across the line more than 60 per cent. of our coal, more than 98 per cent. of our oil, and we import from other countries more than 96 per cent. of our iron and steel, and more than 55 per cent. of them from the United States.

The problem that faced Canada four and one-half years ago was to secure for ourselves the political independence of the future, or the political independence which we have. The problem that faces Canada to-day is to secure for the future our economic independence, upon which true political independence is based.

Now, how can we secure economic independence? Mr. Chairman, I submit that it cannot be secured with a country divided against itself—East and West—nor can it be secured with an unstable fiscal policy, nor can it be secured with a country unbalanced as it is—manufacturer and protectionist predominant in the East and free trader and farmer predominant in the West—nor can it be secured so long as the Canadian banks fail to realize that industrial expansion west of the Great Lakes is just as important to the future of this country as industrial expansion in Eastern Canada; nor can it be secured so long as our

*Speech delivered at the annual banquet, Canadian Manufacturers' Association, June 12, 1919.

railway corporations, because of undue influence from eastern manufacturers and manufacturing organizations, fail to give fair, reasonable and equitable rates on the raw products moving from one point to another, and unfinished articles moving from one point to another in Western Canada; nor so long as Eastern manufacturers individually and through their organizations fail to realize that the industrial expansion of the West is essential to the unity of this country, and try to better the conditions and branch out and build industries west of the Great Lakes. But we can secure our economic independence by a united Canada East and West, by a stable fiscal policy. A united Canada and a stable fiscal policy can be secured by the intensive development of our great natural resources by scientific methods, by the building up of industry west of the Great Lakes; and by the building of that, west of the Great Lakes, we in the West would have something in common with you in the East, and having that in common, that interest will be expressed in legislation which will serve alike the interests of industry and agriculture as well.

Develop West's Resources

Realizing, then, that national unity is essential to national security and to national development, and realizing further that the time has come when we must develop industry as well as agriculture in Western Canada, we believed that the time was opportune for the development of these great natural resources of Western Canada, these basic products—our great coal areas in Alberta, 12½ per cent. of the world's supply, more than five times the amount contained within the British Isles, equal to the amount contained in China, twice the amount of the coal contained in the German Empire, more than that contained in all Australia, and one-quarter of the amount contained in the United States. We further realized and decided that our iron ore in British Columbia, which has yet been unscratched, should be developed for the interests of this country; and we decided also that those great oil resources in Alberta, which you have heard much about, but which as yet have been undeveloped, and which scientists claim are probably one of the greatest undeveloped fields in the world—we thought the time was opportune that these great oil resources should be developed to bring about the economic independence of this country. We thought that our great copper resources in the West should be developed; we thought our great natural gas deposits in the south—for we have probably the second largest gas field which has yet been discovered in the world—this gas we thought should be put to use for building up industry in this country and developing our economic independence. We thought these great resources should be developed and so, Mr. Chairman, a mission has been started in Alberta to bring about their development, not to create a real estate boom, because we have had all we want of that, in Western Canada, and all the oil booms we want, but what we need in Western Canada to-day is scientific development, research into our by-products and the bringing about of the scientific development of them in an intelligent way. So this mission was begun first in Medicine Hat last fall at the Convention of the Union of Alberta Municipalities, when I was asked to give an address upon the subject of our natural resources. This address was followed by the appointment of a committee. The committee decided to call a provincial-wide conference opened by His Honor Lieutenant-Governor Brett. We called upon the Government by resolution to create an industrial department, which they did, for the purpose of bringing about research, spending money to find out what products we had and then submit an intelligent report on such resources to capital and to the industries of the east and south. This Department will try to intelligently determine what we can manufacture successfully in Alberta and give you facts and figures to prove the statement. The Government has set aside quite a large amount of money for this purpose and created a Department under the Minister of Municipal Affairs.

Formed Industrial Association

We took one step further; we decided to create an industrial association, which has been organized for the purpose of working as between the people and government, and bringing about an educational campaign in the West and with the idea of letting the people know what the Government is doing, and educating the people of the Province to the necessity of industrial development in Alberta as well as agricultural development. Now we are going to have a great industrial congress, with the idea of bringing from the East to the West and from the South to the West, the manufacturers who might consider developing in Alberta. This congress will take place in August, between the 11th and 16th, commencing in Medicine Hat and going to Lethbridge, and from there by special train to Calgary, where two days' session will be held, and from there proceeding to the capital city of Edmonton, where His Honor, Lieutenant-Governor Brett, will take you in hand, and he will entertain you at his house upon that occasion, and he knows how to entertain. From there the congress delegates will tour to Banff, spend the week-end there, and then disperse.

We have invited to this congress 20,000 manufacturers of the United States and Eastern Canada and also business men. We have secured the definite promise by interview of a number of the most prominent men in the country and a number of the most prominent men across the line to be present, for instance, the President of the International Harvester Company, Mr. Harold McCormick; Mr. Henry Ford; Mr. Louis Hill, President of the Great Northern Railway; Capt. Robert Dollar, of the Pacific Coast, President of the Dollar Steamship Line and Vice-President of the National Trade Council of the United States, who will speak on the possibilities of Oriental trade; and a number of other prominent men, are coming from across the line. We hope to have the presence of Mr. Samuel Gompers to represent Labor; from Eastern Canada, Mr. E. W. Beatty, President of the C.P.R.; Mr. Hanna, of the Canadian National Raliways; Mr. Findley, of the Massey-Harris Company; Sir John Willison, and other outstanding Eastern men, will attend the congress as well. We want the Canadian Manufacturers Association to be represented by a special trainload of delegates on that occasion.

Decided to Become Industrial

I wish to say here, Mr. Chairman, in all frankness, that the people of the West have decided definitely in Alberta that no longer will we continue to be only mere producers of raw materials; we have decided that it is manifestly in the interest of the Province and of the people of the country, and of the people of the East as well, that in order to build up the Province and make it a great one, that we must have industries built there as well as agricultural development, because you cannot develop any country successfully unless you have industry and agriculture, because they are both dependable one upon the other. We ask your kind support towards this movement. It means much to the manufacturers of Eastern Canada. It is a national undertaking, and it is of interest to bring together the interests of the East and of the West. We can unite by having a stable fiscal policy; we can unite when we have manufactures west of

the Great Lakes and when we have something in common. But you will never unite in this country so long as you have one end of the country devoted to agriculture and the other devoted to industry. I say, and I have said, to the farmers of our country that if they hope to make that country great, they must find their home markets for their agriculture; and let me say to-night that I am satisfied if we don't find our home markets in this country for the agricultural products of the West, that within ten years the man who is raising wheat and wheat only in Western Canada, will not get any return for his products, or not what he should get. I am as satisfied as I am standing here, that within ten years, on account of the development which is bound to take place in Russia, we will have a competitor there that will challenge the agriculturists of the West; and I believe with all my soul that the one solution for Western Canada is to build up our home markets and develop them by developing industry, not only to take care of the trade west of the Great Lakes, but to take care of foreign trade, which is possible by the Pacific trade routes. When you think for a moment and when you realize that in China on the banks of one river and its tributaries live one-seventh of the world's population, fast awakening to the call of civilization. And they are buying American-made goods to-day. I saw a list of two cargoes of merchandise shipped on the Dollar Steamship Line, in the hands of Captain Dollar, 15,000 tons capacity, sailing from San Francisco, and there were 298 lines of American-made merchandise on those two steamers alone of 15,000 tons total capacity. What are we doing? We have one man in China who until two months ago never set foot on Canadian soil for seven years. Then Americans have men who are scouring for business in China. I say that there is a market there that can be developed. Build your industries west of the Great Lakes and take care of the market and have your surplus market in the Orient and in Siberia; take care of the Australian market and the market of Chile and the other markets you can reach by the Pacific trade routes.

Let the people of the East unite with the people of the West in building up industry west of the Great Lakes. In that way unite the people of this country, in that way bring about a stable fiscal policy; in that way, Mr. Chairman, let us build up a democracy of which every Canadian will be proud.

I thank you for this opportunity of saying these few words to you.

An Invitation from Alberta*

By DR. R. C. BRETT
Lieutenant-Governor of Alberta

MR. PRESIDENT and Gentlemen, I assure you I quite appreciate the honor you have done me in calling on me to say a few words. I know at this late hour that you don't want to hear a speech. However, I am glad to be called upon for this reason alone, that it gives me an opportunity to thank you and the Association for your very kind invitation to be here to-night, an occasion I may say to you that I have enjoyed very much. I always enjoy hearing discussions of men who are empire builders, and that, I think, is something that the members of this Association can very well claim to be.

Crystallized Intelligence

We received from nearly every speaker to-night a certain amount of advice, and I regard this Association—an Association of men who meet together once a year—as one of the most important parliaments that congregate in Canada; and parliaments, you know, are always given advice from the people—sometimes good advice; sometimes advice they take and sometimes advice they don't take. It struck me in listening to the different addresses, and the advice that was given or the hints that were thrown out for this Association, that you have responsibilities to-day greater than probably you ever had before. We have industrial unrest, we have other causes of unrest, and differences between this and other portions of the community, so that your responsibilities, to my mind, are greater to-day than ever before, because you can't shirk. You are, I might say, the crystallized intelligence or business acumen of the Canadian industrial world, and if not to you, to whom or what body can the people of Canada look for some assistance and some advice and some action at this particular time? I have no doubt in the world but that every member of your Association is seized with his responsibility in this respect.

There is just one thing that struck me—and if I were going to give any advice I would only emphasize this—and that is, there never was a time when not only the subjects that would be profitably discussed by this Association, but in other walks of life—in every walk of life, in fact—there never was a time, to my mind, when the importance of getting together was as great as it is at the present time. In the West I don't suppose there is any use denying the fact that the farmers have an idea that all their ills and troubles are entirely attributable to this Manufacturers Association. I don't know, I am not going to say that they all are, and I am not going to say that none of them are, but at any rate I don't believe they are of such a serious character but that they might be adjusted; and I believe a very much different feeling would exist if this Manufacturers Association would go West, not one delegate, not two delegates, not the President and Secretary alone, but a good carload, and tell the people, we are coming out to see you, we think we owe it to you, you have been buying our products, we buy yours, and we want to get together; we want to sit around the table and talk over this thing, because we believe you attribute some of your troubles and some of your ills, and so on, to us.

Opportunity to Meet Farmers

Now is there a more favorable opportunity than what his Worship, Mayor Brown, of Medicine Hat, has given? There is to be this Industrial Convention in August, a splendid time of the year to see the North-West, Alberta and Saskatchewan. There could not be a better occasion for you to go out and talk to the farmers and get them together and say, Now, you are dissatisfied about this and that, let us get together and talk the matter over. I am quite sure that much more friendly relations would result from it. Besides that, as His Worship has just said, it might be to your advantage to go there. Alberta is an ambitious province, and I think justly so. I am not here at this time to laud Alberta and to tell you of its natural resources and what I hope in the future it will develop. You should go

*Delivered at the annual banquet of the Canadian Manufacturers' Association, June 12, 1919.

there for yourselves, because you may depend on this, that the people who live in Alberta, knowing full well of the resources of that Province, are not going to let them lie idle. They would very much prefer to have their fellow Canadians come there and develop them than anybody else, but, if you don't come, they are going to be developed anyway. So I can only add this, that I personally would very much like to welcome a good trainload of you up there in Edmonton, and I know the Government are anxious to show their appreciation of your visit if you come, and they will endeavor, and between us we will hope to give you an entertainment, not the kind of entertainment you give here in this Queen City, but we will do the best we can and that is all you can expect of us. I hope to be able to welcome a great many who are here to-night in Edmonton in August. I thank you, Mr. President, for this opportunity of saying a word.

Western Member Urges Educational Campaign

Mr. Robson Comes from Edmonton to Impress Upon the Association the Urgency of the Need for Establishing Better Relations with Western Agriculturalists

SPEAKING at the morning session on the third day of the Convention, Mr. Robson, of Edmonton, introduced a matter which he deemed of pressing importance at the present time—the establishing of better relations with the farmers of the West. Mr. Robson's remarks were as follows: "As you know, I come from Edmonton. There is a large territory there; probably you don't realize its extent. When I am in Edmonton, I am 300 miles from the United States boundary, and yet there is wheat coming down to Edmonton for shipment from probably 500 or 700 miles beyond. There is wheat grown in the neighborhood of 2,000 miles north of Edmonton, though probably this does not come to the front for shipment. You can start at Calgary and come along the boundary a thousand miles to Winnipeg. Then you can go 50 or 100 miles north and run a line right across the country to the other 2,000 miles and it is virtually an agricultural section. Now it appears to me that there is an organization there, gentlemen—I have watched it grow, and while I notice that industrial and manufacturing development has taken precedence over agricultural development in the last year or two, whether they will be able to retain that lead or not is a question. The point I want to make is this—that, following Winnipeg east, you have probably a thousand miles there of a natural division between what is virtually the manufacturing section of Canada and the agricultural section. I don't mean to say you don't grow grain in Ontario; you do, a great deal; but that section out there is virtually an agricultural section, and I don't believe the individual members of the C.M.A. have centred their attention on that in the right way.

May be Trouble

"As to the campaign of education which is being carried on at the present time: I don't know where the money comes from for it; I have not seen it in the western papers. I am a manufacturer out there, and we are somewhat in the same position as Belgium was in the war. We have got to take a kind of neutral attitude with regard to it. I was sent down here for the express purpose—but I don't likt to be unreasonable, and I don't wish to be unreasonable, and I know that the Association dues that you could get from Alberta would not be enough to keep a secretary in Alberta—but it seems to me some campaign of education is necessary, and this matter of what you call newspaper advertising does not foot the bill. But if we don't watch, gentlemen, there is going to be trouble. At the present time that agricultural development, that organization, that combination that is out there, is a growth of a few years. Now, I have no objection to the farmers getting together; they are all right in getting together, the same way as the manufacturers are, and I am not one of those who would not go to work in harmony with them, but what I can't understand is—and I am ready to be enlightened—what Mr. Parsons said the other day, that it seems to be impossible to get the members of the Manufacturers Association and the farmers together. I don't understand that. I am a farmer's son myself, and I have had a good deal to do with farmers, and I can go to the farmer any time, and while I cannot get him to agree with me, I can have an enlightened, intelligent conversation with him.

Insurance Area of West

"The point I want to make is this—we have in the West one division for Alberta, Saskatchewan and Manitoba; the secretary is in Winnipeg, and, if he wants to go to Alberta, he has got to go over some 800 miles. Some of you remember that cartoon that was in the paper after the war was over, when our men were back in the trenches, and England was here and Uncle Sam said, 'Don't be afraid, I will just be over here, 3,000 miles away.' Those Englishmen can come out to Winnipeg and Edmonton and their friends can write to them and say, 'Oh well, so and so is back here in Edmonton, you can go out there and have Christmas dinner with him.' There is a large stretch of territory there. I think it would be well for the Manufacturers Association to study the psychology of the farmer and put on some sort of educational campaign. This kind of antagonism that appears to be growing is not in the interests of Canada as a whole. You know yourself that the man who stays in a locality is probably not as broad-minded as the man that is able to get about a bit, and probably it is the duty of the Manufacturers Association to lead in the matter of trying to show the proper spirit. I just throw out those suggestions, gentlemen, in passing. If I had only had you in Edmonton instead of here I could make you understand."

(At a later stage in the proceedings, Mr. Robson referred as follows to the way the banks had met the farmers and laid their case before them).

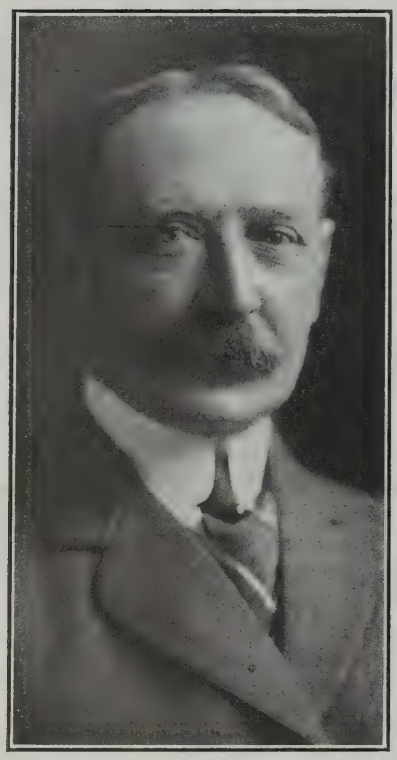
"The farmers made an assault on the Canadian banks but Mr. Brown, of the Canadian Bank of Commerce, championed the cause of the banks and went into the Associations and handled the question tooth and nail. The suggestion I was going to make was that, in order to harmonize the relationship between the C.M.A. and the farmers, men who understood our views should go into their Associations and talk to them. Those associations all hold meetings and the members bring their families, and I don't believe the manufacturers have had a representative to say anything to them at their conventions. I believe that, if you have someone who will be there and talk to them, a great deal can be accomplished. I admit it will take some money to do it, but I don't know how it is going to be accomplished otherwise. I know that kind of personal touch gets over a great many difficulties, and that is what I was going to advocate."

Problems of the Day Facing Canadian People*

Relations Between Capital and Labor—Necessity to Find Outlets for Surplus Products—Maintenance of the Tariff Essential to Progress —Position of the Maritime Provinces at the Present Juncture

By W. S. FISHER

Chairman, 1918-19, Maritime Division, C.M.A.



W. S. FISHER
Enterprise Foundry Co., Sackville, N.B.
Elected 2nd Vice-President, 1919-20, C.M.A.

CONDITIONS the world over are very disturbed. How could it be otherwise after such a tremendous upheaval? Labor everywhere is seeking for greater opportunity, for more leisure, for higher wages, as an offset to the present high cost of living, and improvement in its conditions generally, and Capital naturally hesitates, owing to the uncertainty of the future and the general unrest now so much in evidence. Many extreme and fanciful views are put forward as a panacea to cure all ills by means of which everyone will prosper whether he works or not.

That these difficulties will right themselves in due time I have no doubt, though the process may be painful and tedious. The Government has appointed a Royal Commission composed of representatives of all classes, to study conditions between Capital and Labor and see how they can be improved. Let us hope that their efforts will meet with some measure of success and that order may arise out of the present chaos.

I think it goes without saying that every employer of labor realizes that a contented body of well-paid workmen and their hearty co-operation is one of his greatest assets; indeed, an important factor in the successful carrying on of his business. How to secure this co-operation and thus effect a better mutual understanding of the difficulties of each is a matter that deserves the most careful consideration, and which at this meeting should be thoroughly discussed.

We had hoped to have T. A. Moore, President Trades and Labor Council, with us at this session, but being in the West on the Royal Commission, he was unable to come.

Skilled Labor has as much at stake as Capital in the upbuilding of industry, and in its maintenance on a stable basis, and where the interests of both parties are so identical, it should be possible to find a way to get together to study each other's problems and difficulties, and so find a basis for mutual co-operation and helpfulness.

The productive capacity of Canada in every line has been immensely expanded by the war. Not only did we take care of our own home requirements, but exported hundreds of millions of dollars' worth of food products and manufactured goods in excess of any previous period, this notwithstanding the fact that practically half a million of our most active men were withdrawn from their usual employment.

Without going into statistics, but as illustrating the wonderful growth in our exports of manufactured goods during the war period, one example is sufficient, and it is that in 1918 our exports of pulp and paper alone were valued at something over eighty-nine millions of dollars, a greater amount than the total export of all manufactured goods from this country in any previous year in our history. One of the greatest problems now ahead of us is to find a market for the great surpluses of both food and manufactured goods that the war has made clear to us we are able to produce in excess of our own needs, and which we must continue to make and sell if we are to keep our people employed and maintain our prosperity.

How Pay Interest on Debt

If we fail to find this outlet, in what other way can we hope to pay the interest on the enormous debt incurred in connection with the war, which must be met? The U.S. with their highly developed industries, great natural resources and vast wealth, have made great strides during the past four years in opening up and securing a foothold in many foreign markets, which their Government and people are now making strenuous efforts to retain and increase.

Great Britain, too, emerges from the conflict much stronger industrially than ever, and better fitted, as well as more determined, to retain her share of the trade and commerce of the world.

On the other hand, Canada has become known the world over as a land of promise and prosperity, and many eyes are being turned our way, so that we may look forward to a large immigration to our shores as soon as the present world-wide unsettled conditions readjust themselves. Meanwhile a large number of American farmers from the United States are coming into the western provinces with their families (it is stated at the rate of one hundred thousand a year). These new home-makers are settlers of the very best type, having both money and experience, and are looking to Canada for better opportunities than they left behind. We give them a cordial welcome. What can be done to secure for the Maritime Provinces a share of these home-seekers, especially those coming from the Old Land? We have many advantages to offer them, a country already well settled, with a climate more like their own and an excellent opportunity for industrious men and women to create happy homes in our midst.

Let us therefore urge upon our Provincial Governments the desirability of an active propaganda in conjunction with the Federal Government that will secure for us a share of these newcomers who will soon be looking for homes overseas.

The eyes of the world are turned towards Canada as never before. The prompt and hearty response made by this country at the outbreak of war, the magnificent work of our troops at the front, their deeds of valor, courage and re-

* Address delivered by the retiring chairman at the annual meeting of the Maritime Division, Halifax, May 28, 1919.

sourcefulness in times of stress have made a lasting impression upon the world and upon all with whom our men came into contact. The manner also in which Canada responded to the call of the Motherland for food and munitions and the work of the women of this country during the years of anxiety and danger will form one of the most glorious chapters of our history.

To the memory of those heroic souls who gave their lives that the cause of right might prevail, we pay our homage of respect, and to the bereaved ones tender our sincere sympathy. Those who have returned to us, or are still to come, with bodies shattered or health impaired, we welcome back in the earnest hope that the Homeland may restore them once more to strength and vigour and assure them our hearty sympathy and co-operation.

Prospect is Bright

We also heartily welcome those who are returning in full health and strength and looking forward eagerly to rejoining their families and taking their places once more in the activities of life to do their part in building up a nationhood that will be a source of pride and joy to all those who live within its border. These men are coming back with a wider vision and increased knowledge and are bound to play an important part in shaping the future destinies of this country.

Under the protective policy, which has been in operation under different political parties for forty years, this country has prospered as never before, and during the past few years much American capital has been invested in branch factories in this country, which has given manufacturing a great impetus.

The prospect for further developing along the same lines has never been so bright as it is at present, with many American capitalists looking over the ground with a view to investing large sums in establishing factories within our border. One reason for this is that they wish to be in a position to take advantage of the preferential tariff within the Empire now being arranged.

What more conclusive argument can there be in favor of a moderate protective tariff than the fact that Great Britain after centuries of free trade, has adopted this plan as necessary for its future safety and preservation and that of the Empire?

The tariff is in every sense a national issue, and any attempt to localize it highly unpatriotic. That this country must have a tariff that will give proper and reasonable protection to those interests that require it there can be no doubt, and with this general principle both political parties are in accord.

Tariff Should be as Low as Possible

That it shall be as low as is consistent with this principle is certainly most desirable in order that we may make this country as cheap as possible to live in. Let us urge, therefore, that the Government will without delay appoint a Commission of capable men who will study the question from every angle, and, after thoughtful consideration of all interests involved, submit a plan that will make for the prosperity of all classes, whether agricultural, industrial or commercial, and for the more rapid development of our national life along sound lines.

There is a good deal said in general terms about the profit of the manufacturers, which is very misleading, and which the history of manufacturing in this country does not justify. Those who make these statements, as a rule, are people having no interest in manufacturing, in fact, those who could not be induced to take the risk of investing their money in this way. While it is true that this country has many prosperous industries, the majority have had to fight hard for existence against great odds.

All that is necessary is to look back over the history of manufacturing in this country during the past thirty years in order to realize what a tremendous struggle it has been and how many have fallen by the wayside. The successful ones are those who, by ability, hard work, economy and perseverance, have overcome the difficulties in their path, and have been able to build up industries that now form the backbone of many thriving towns all over this country. In illustration of the relentless struggle waged by those engaged in industry, it is only necessary to cite a portion of a report submitted about two years ago by a Federal Trade Commission in United States. This report points out that out of 250,000 concerns which their enquiries covered, over 100,000 earn no net income whatever. In addition, 90,000 make less than $5,000 a year. This means that only one in four is successful enough to earn more than $5,000 per year net profits.

Canada, her resources and possibilities, are being discussed and written about everywhere, and the value of all this and its influence on our future progress and prosperity no one can measure. We, in the Maritime Provinces, are very proud of this and of our share in what has helped to bring it about. The question that concerns us most, as business men, however, is what we are to secure from the development that will follow, and we know from experience that things are a good deal as we make them.

Advantages of the Maritimes

The advantages of our geographical situation are very great, these provinces forming as they do an important link in the chain of World Empire traffic, our ports offering the shortest sea voyage to this continent, and, what is equally important, are open year around. The experience of the past four or five years has made clear to the people of the West the importance of the Maritime ports, providing as they did, during the three winters prior to the entry of the United States into the war, the only outlet for troops and munitions over Canadian soil.

This fact, and the importance of it is not fully realized by the people in the interior and west, and we should lose no opportunity to emphasize it in order that we may secure the recognition that is due us. Our natural resources are very great and varied, embracing, as they do, the wealth of the forest, the mine, the soil, and the sea, which together are the fundamentals of wealth. We also have an intelligent, resourceful and energetic population.

Are we therefore making the full and best use of our opportunities in the development of the resources at hand and of our geographical position? Should we not make a greater effort to secure the attention of those who are looking to the establishment of industries, especially those for export trade?

Regarding power, which is our greatest lack in the growth of manufacturing, the various local Governments are now engaged in a careful investigation to see what latent power is available, and our Association should keep this subject constantly in the public eye so that no time may be lost in providing this element which is so essential to the development of our industrial life.

I feel that a word should be said to commend the action of the Government in creating trade commissions, especially that headed by Lloyd Harris, who for a year or two did excellent work for Canada in Washington in securing war contracts. The work that is now being done in Europe by Mr. Harris and his associates, with headquarters in London, is of even greater advantage, coming as it does at this critical transition period when Canada needs all the business that

can be secured in order to keep the wheels of industry moving. I feel, too, that we should express our satisfaction at the passing of a general Bankruptcy Act, thus securing uniformity in the treatment of bankrupt estates throughout the Dominion, instead of the many and various Acts that it supersedes, also that the Government have passed a vote alloting a large sum to be devoted to vocational and technical education, to be divided *pro rata* among all the provinces who choose to take advantage of it.

At various meetings of the Maritime Branch held during the past two years, we have heard many fine addresses by able men dealing with matters of great interest, such as development of water powers, technical and vocational education, application of science and research to industry, workman's compensation, accident prevention, fire prevention and safety appliances, export trade, reorganization of industries after the war, Maritime Union, and from all of which I feel sure those who had the privilege of hearing received much benefit. This branch, though in its infancy, has already done good work for the members, and I am confident that as time goes on the services rendered will be found of still greater value.

Our Secretary, in his report, will tell you about the various activities carried on during the past year, especially his own work, and I wish here to testify to the zeal and earnestness he has shown in carrying on the duties of his office, and to express the hope that it may be possible to retain his services in the future.

In retiring from office, I want to express my sincere thanks to the members of the Executive Committee and the membership at large for the uniform courtesy and hearty co-operation extended to me during the time of my occupancy of the office of chairman, and to say that this period has been one of great pleasure to me.

An Industrial Art Movement for Canada

By E. C. McKINNON

President. Guild of Arts and Crafts of St. Catharines

A STRONG undercurrent is bringing art and industry together again, after a century of alienation. In the old days, they were mutually interdependent. The furniture-maker, the pot-and-pan maker, the weaver, the stone-cutter, were all craftsmen, and, in so far as they did their work well and gave to it good qualities of form and color, they were artists.

To-day, conditions are uite different, because of the tremendous development of machinery. When the manufacturer began to realise the almost unlimited possibilities open to mechanical ingenuity, he usually forgot to provide for the thing that the machine alone can never possess,—the human instinct for beauty. This gave the designing of articles of everyday use in house-building and furnishing, clothing, and various minor necessities into the hands of people who, while expert in their own field, had no training in the laws of proportion and color, and no taste, except in a few fortunate instances. Thus, although the purely mechanical and utilitarian manufacturers of the new countries, where art was not held of serious account, easily began to rank high in the world's trade, yet the so-called "art manufactures," when they were developed, were contented to stay in second or third place.

European countries had lost little time in adapting many of their artists to the requirements of trade, knowing that only by the use of thoroughly trained and well-paid designers could their prestige be maintained. But in America, the artists were all driven to painting pictures; which they, in self-defence, began to explain was the only work suitable for an artist.

This lamentable state of affairs is fast improving, but there is great need for an organized Industrial Art movement in Canada, such as is now sweeping the United States.

The principal lines of manufacture which would be directly benefited are:

Building trades of all sorts, makers of decorative concrete, clay products and tile, ornamental glass, mantels and grates, builders' hardware, metal castings, monuments.

Makers of all kinds of household furnishings and utensils, silver-ware, baskets, wall-papers, electric fixtures, stoves, furniture.

Automobiles and accessories.

Makers and buyers of boxes, cartons and containers. Metal-ware products.

Lithographers, printers, engravers and embossers. Makers and users of labels, signs, banners, advertising novelties.

Photographers, film-makers, brass and copper founders.

Textile industries; toys.

Among the objects and results would be:

(1) The founding of industrial art schools, such as flourish in every large and small industrial centre in Europe, where young people of talent can be encouraged to do more practical designing and less picture-painting, except in case of those gifted along that particular line.

(2) Co-operation between the live art organizations of the country and those representing manufacturing interests. An Exhibition might be held on lines similar to that recently given at the Albright Gallery, Buffalo, under the auspices of the Chamber of Commerce and other leading business organizations, as well as of the art societies, showing in just what ways the use of art in industry is commercially profitable, not only to the individual manufacturer but to the trade of the country as a whole.

(3) The establishment of an independent and characteristic school of Canadian design, enriched by study of the past and by contributions from our foreign population, but freed from the rigid shackles of "historic styles."

(4) Encouragement of the creative impulse in industsy, leading to more satisfying conditions of labor. Conclusions reached by economists and industrial experts of the more modern "humanist" school, although arrived at by quite a different process, present essentially the same point of view as that always held by great artists as rock-bottom truth in regard to the relation between man and his work. The art organizations and institutions of Canada are quite awake to the vital issues of the day, and consideration of their attitude on these points may shed some light on the vast difficulties which threaten the industrial world.

As a first step in the movement, which aims to be of benefit to the commercial as well as the artistic welfare of the country, it is desired that the Secretary of the Canadian Manufacturers' Association secure the names of all members who would be interested,—

First: In using Canadian designs, if it were possible to secure suitable ones. Second: In becoming members of a proposed national Industrial Art Association, to further the general and specific objects before mentioned. If the response is sufficiently encouraging, steps may be taken during the summer, in the matter of an exhibition.

Millions of Cards for Made-in-Canada Appeal

Canadian Reconstruction Association Launches its Big Campaign this Month for the Encouragement of Home Industry—Leaflet Prepared by the Association Exposing Some of the Evils of German Propaganda and Bolshevism

By SIR JOHN WILLISON
President, Canadian Reconstruction Association

THERE has been an immediate and gratifying response from manufacturers to the Made in Canada campaign proposals of the Canadian Reconstruction Association. As stated in the last issue of INDUSTRIAL CANADA the Association has arranged for an extensive poster advertising campaign in cities and towns throughout the Dominion. This will be supplemented by the circulation through manufacturers of colored pictorial cards designed to make a special Made in Canada appeal to employees and purchasers. The poster campaign will be launched on July 1st. At the same time it is hoped that hundreds of thousands of the smaller cards will be in circulation. Arrangements have already been made for printing 5,000,000 cards, and manufacturers were recently notified that the cards could be had free upon application. In urging their distribution the Association said: "Adequate circulation for these cards is impossible without the direct co-operation, in their own interests, of Canadian manufacturers. In sending this bulletin to you, the Association presents actual reproductions of the cards. These cards will be sent to you in any quantities you may desire for direct distribution to your employees and customers, and the following methods of distribution are suggested:

Insert the cards in your business letters.
Insert the cards in your pay envelopes.
Attach the cards to pay cheques.
Distribute the cards by hand to your employees.

Other methods will suggest themselves to you. Whatever the method, the Association will appreciate your active co-operation to make distribution as effective as possible. It is your business, our business and the nation's business."

Hundreds of thousands of cards have already been ordered. One firm alone is taking over 750,000. Many firms have asked for amounts varying from 30,000 to 5,000, and it is expected that a second edition of the cards will have to be printed almost immediately.

Booklet on Bolshevism

In view of the disturbed industrial situation and the pronounced Bolshevist activities in Canada, the Canadian Reconstruction Association has prepared a special four-page leaflet dealing with the findings of the Overman Committee of the United States Senate on German Propaganda and Bolshevism. A quarter of a million leaflets have been ordered, and it is planned to give them the widest possible circulation. Copies have been sent to members of the Federal and Provincial Parliaments, manufacturers, labor unions, clergymen, farmers, school teachers, University professors, bank managers, brokers, doctors, and others. The close industrial relationship between the United States and Canada and the exhaustive investigation of Bolshevism by the United States Senate gives particular value to the report. Some of the statements of the Overman Committee are so striking that reproduction may be permitted here.

Concerning the family, the Committee says: "Bolshevism accords to the family no such sacred place in society as modern civilization accords to it. Conflicting reports have been passing current during the last few months relative to the nationalization of women by the new Russian Government. Two or three local Soviets have apparently thus degraded the womanhood of their particular districts, but the central Government has refrained from adopting any such policy in the whole nation. They have, however, promulgated decrees relating to marriage and divorce which practically establishes a state of free love. Their effect has been to furnish a vehicle for the legalization of prostitution by permitting the annulment of the marriage bonds at the whim of the parties, recognizing their collusive purposes as a ground for the severance of the matrimonial state. The apparent purpose of the Bolshevist Government is to make the Russian citizen, and especially the women and children, the wards and dependents of that Government. Not satisfied with the degree of dependency incurred by the economic and industrial control assumed by its functionaries, it has destroyed the moral obligation of the father to provide, care for and adequately protect the child of his blood and the mother of that child against the misfortunes of orphanhood and widowhood."

Russia's Industry Ruined

There has been frequent official testimony to the industrial stagnation in Russia. Concerning this ruination of industry the report says: "Confiscation, under the milder term of nationalization, has eliminated from all industrial establishments such as factories, mills, and mines the business acumen and scientific methods necessary to successful operation and competitive methods. This has been followed by the stagnation of the industrial life of the country, and even those nationalized industries which have been able to operate under Government control have operated at an enormous percentage of loss, the deficiencies being met from the unlimited issue of fiat paper money printed by the Government. The nationalization of the enterprises essential to the production and delivery of raw materials has so handicapped their production as to restrict the quantity of raw materials available for the maintenance of industrial enterprises, and the whole economic condition of Russia has made it impossible to secure relief from foreign sources."

The grave danger to rural communities through the nationalization of land is exposed in a few short paragraphs which deserve the attention of farmers throughout Canada. The Committee says that if the Bolshevists secured control of the United States as they have of Russia, millions of farmers would be deprived of the right of participation in the affairs of government and substantial elements of the rural population would be subjected to special repression and restrictions. "Under the revolutionary formula the voting power of the cities would be five times as great as that of the rural communities, the ratio of the representation in cities being 1 to every 25,000 of the population, while that of the rural districts would be only 1 to every 125,000 of the population. In the United States the rural population under the 1910 census was considerably in excess of the urban. We must also remember that the application of the formula would include the disarming of all disfranchised classes and the

arming to the teeth of the criminal and alien elements. It would result in the confiscation by the Government thus constituted of the land of the United States including 6,361,502 farms, of which 62.1 per cent, or 3,948,722 farms, are owned in fee by the farmers who cultivate them and represent the labor and toil of a life-time. On the farms of the United States there are improvements, machinery, and live stock to the value $40,991,449,090, (census of 1910), all of which would be confiscated with the land."

On bank deposits and life insurance, the Committee says: "Complete control of all banking institutions and their assets is an essential part of the (Bolshevist) revolutionary programme, and the 31,492 banks in the United States would be taken over by the Government and the savings of millions, including 11,397,553 depositors drawing interest on accounts in savings banks, and consequently belonging to the so-called bourgeois or capitalistic class, jeopardized."

"One of the most appalling and far-reaching consequences of an application of Bolshevism in the United States would be found in the confiscation and liquidation of its life insurance companies. Almost 50,000,000 life insurance policies representing nearly $30,000,000,000 of insurance, the substantial protection of the women and children of the nation, would be rendered valueless."

The Need for Civil Service Reform

By H. MACDONALD
Secretary Legal Department, C.M.A

IN connection with the resolution passed at the last annual meeting of the Toronto Branch, it may be fitting to state that the interest of the C.M.A. in Civil Service Reform lies entirely in the fact that an efficient public service is of the greatest possible importance to the well-being of the country. The day is past when this subject can be viewed from a political standpoint—least of all from the standpoint of party politics. The transactions of business men bring them into close and frequent association with Government officials, as well as with the Ministers of the Crown, and the fitness of officials for the positions they occupy is as easily noticeable by our members as is unfitness, where it exists. An efficient Civil Service means promptness, energy, skill and intelligence in handling public business and the country demands no less than such qualifications as these, in its officials.

The C.M.A. favors the absolute elimination of patronage in the selection, appointment, promotion and service generally of all public officials holding office under the Dominion Government and also Provincial Governments.

To secure this end, the following provisions should be made:—

(1) The powers of the Service Commission should be sufficiently large to enable it, without reference to Ministers of the Crown, to deal with all questions respecting the efficiency of the Civil Service.

(2) The Deputy Ministers, the heads of branches of the Public Service, ought to be charged with full responsibility for the proper carrying on of the work of the Department or branch concerned, and for the proper discharge of all duties in their respective Departments or branches The relations between the deputies and heads of branches, on the one hand, and the Civil Service Commission, on the other, should be well defined with the object of obtaining the best possible results.

(3) In matters of dispute between the Civil Service Commission and a deputy minister or head of a branch, an appeal might be made to a Minister, on whom the ultimate responsibility would naturally rest.

(4) Demanding first-class service and undoubted efficiency, the country should be willing to pay for such, according to the standard observed in the country.

Work of Cabinet Ministers

It is important that there should be a greater devolution of duties from Ministers of the Crown upon those under them than at present in most cases exists. For instance, Ministers of the Crown ought to be left free from matters of routine and from details of the work of their departments, so that their time may be devoted to the greater questions of policy and general direction of administration within broad lines. At present it is customary for Ministers to grant interviews on a large variety of comparatively unimportant business. This is done as a matter of courtesy and supposed good policy on the part of the Ministers, whereas it is unbusinesslike in so much as a great deal of time is thereby diverted from the proper consideration of large questions of vital importance to the country. There can be no doubt that Deputy Ministers and others placed in positions of responsibility, ought to be invested with sufficient powers to transact, at first hand, a great deal of ordinary business submitted for the consideration and decision of Ministers of the Crown, and a strong feeling exists that here sweeping reform is very much to be desired. If the gigantic problems of the public service, urgently awaiting solution, are to be handled effectively, the machinery of our public services must be reconstructed on the most approved principles.

Sowing the Seed

A RECENT visitor at the Winnipeg office of the Canadian Manufacturers Association was Mr. Asher Cucuy, the representative of a party of approximately two hundred Hebrew families who have been farming in Western Canada for some years and who are now planning to return to Palestine and form a settlement there. One of their number will leave shortly with a view to securing land and making arrangements for the families who will leave next fall. Mr. Cucuy states that as all these people have become accustomed to the use of Canadian and American manufactured goods, they desire to place themselves in communication with Canadian manufacturers with a view to obtaining a continuous supply of their goods for use in Palestine. Mr. Cucuy was assured of the interest of the Association in this matter and was supplied with a copy of the Canadian Trade Index.

Unemployment Pay in Great Britain

Over a Million People are in Receipt of the Out-of-Work Donation, and a Sum of Twenty-five Million Pounds has been Provided in this Year's Budget to Meet the Charge—Some Glaring Abuses Have Crept Into the System, Despite its Advantages

By JOHN C. KIRKWOOD

ONE million and ninety thousand persons in Great Britain are drawing the unemployment donation or "dole" given by the Government of the country. Of these, 350,000 are "members of His Majesty's forces"; 40,000 are women; 108,000 belong to the engineering trade, and 100,000 to the cotton trade.

With the Armistice came the prospect of large numbers of people on the street without any means of livelihood, and the only alternatives to unemployment pay were to leave them to fend for themselves, or to continue the useless manufacture of munitions.

High Pay for Idlers

The figure at which the unemployment donation or dole was originally fixed—namely, 29/ per week for men, and 25/ for women—was such as to induce certain persons to remain idle rather than to look assiduously for work. This circumstance led to a revision of out-of-work pay, and the 29/ a week for men fell to 20/, and the 25/ a week for women to 15/. Only ex-soldiers and ex-sailors receive any higher rate than the reduced scale.

Mr. Kirkwood, whose contributions during the past year, especially along the line of cost accounting, have been much appreciated by readers of INDUSTRIAL CANADA, is now resident in London, England. From time to time he will send over articles dealing with the problems with which Industry is faced in the Old Country, in the hope that the experience of British manufacturers may prove advantageous to Canadian manufacturers.—Editor.

Since the Armistice, more than 2,500,000 service men have been demobilized, and 1,500,000 workers on war industries have been released, making a total in excess of 4,000,000. Instead of the number of recipients of the "dole" lessening, Government experts expect it to increase. Cotton manufacturers, for example, contend that they cannot continue work because of the high prices being asked in the United States for raw cotton, and in consequence, by agreement with the Trade Unions, they have "locked out" the 200,000 operatives so that they may draw the Government unemployed donation.

The lure of out-of-work pay is making it difficult for some employers to obtain workers in sufficient numbers, and has led to large numbers of persons actually leaving their employment for the imagined pleasures of idleness.

Unemployment, to a very considerable extent, is alleged to be attributable to employers, who have not fully co-operated with the Employment or Labor Exchanges, neglecting to answer enquiries. Sir Robert Horne, Minister of Labor, has made a strong appeal to employers for their greater co-operation with, and use of the Labor Exchanges as a means for reducing unemployment. Following is the text of a circular letter addressed to employers:

"At a time when the efforts of the nation should be devoted to the resumption of economic life and the avoidance of unemployment throughout the country, I make a personal appeal to all employers to notify their requirements of labor, skilled and unskilled, to the Employment Exchanges, and also, so far as possible, to advise the Exchanges well in advance of intentions to discharge labor where any considerable numbers are involved.

"The Exchanges, as the medium of payment of out-of-work donation, have knowledge of the classes and numbers of workpeople awaiting employment in the district which they serve, and are able also to introduce labor from other districts when the necessity arises. It is of the utmsot importance that the Government should be kept informed of the extent to which EMPLOYMENT is increasing or decreasing in each area, in order that, with the assistance of the local advisory committees connected with each Exchange, preparations may be made for the absorption of surplus labor. As is generally known, the Exhanges are national in character and no charge is made either to employer or workpeople for the services undertaken.

"Employers can also render valuable assistance in the administration of the out-of-work donation scheme by returning to the Employment Exchange with any appropriate comments the Form U. I. 85, which is sent to the last employer. as given by any applicant for donation.

"R. S. HORNE,
"Minister of Labor."

When a claim is made for payments of out-of-work donation, the particulars supplied by the applicant are always sent to the last employer, who is asked to state whether they are correct, and for what reason the employment of the person terminated. It is obvious that the information tion thus obtained must be of great service in the detection of improper claims.

Sir Robert Horne has complained bitterly that in the great majority of cases, employers have not troubled to answer enquiries addressed to them. One employer in great need of labor actually wrote, "We have never had anything to do with Labor Exchanges."

Another difficulty in finding employment for persons willing to work, and in assisting employers in their need of labor, is the great shortage in houses. In one place, for instance, where 3,000 people could be employed, no houses could be found for them. Still another bar to employment is the low pay which many employers have offered. Fourteen shillings a week was offered by one firm in need of 200 tailoresses—this is in face of the fact that the out-of-work pay for women is 15/- a week.

Weeding Out the Wilful Idlers

At the beginning of the institution of unemployment pay, it was easier to get on the "dole" list than it is to-day. Frauds have been very many, and

this circumstance has led to a more rigid investigation of applications. Also, public criticism has been salutary in its effect. Recipients of the unemployment must make fresh applications for a continuation of their dole, and have to go before the Local Advisory Committee. This ordeal has caused a 50 per cent. fall in the number of those seeking a continuation of the dole, and 20 per cent. of the applications going before the committees are rejected. In addition to the Advisory Committee are investigators, and a committee has been appointed to enquire into the whole administration of the unemployed benefit.

The Court of Referees had up to April 17th last, held 5,952 sittings relating to out-of-work donation cases, and disposed of nearly 113,000 cases. An analysis of 5,170 sittings shows that out of 95,045 cases heard, 26,250 claims were allowed, and 68,756 disallowed, while in 39 there was a compromise. The proportion of allowances to total claims was therefore 72.3 per cent.

As illustrating the spirit and action of the Government in discouraging unnecessary unemployment was the stopping of the unemployment donation to 17,000 girls who have refused domestic service. Also, notices have been posted at the employment exchanges, stating that as from May 15th, 1919, no out-of-work donations will be paid to civilians above 18 years of age who were not employed in each of at least 20 weeks during 1918. Incidentally it may be said that between November of last year and May of this year, £1,000,000 a week was paid to the unemployed. The sum budgeted for the current fiscal year is £25,000,000—or about £500,000 a week.

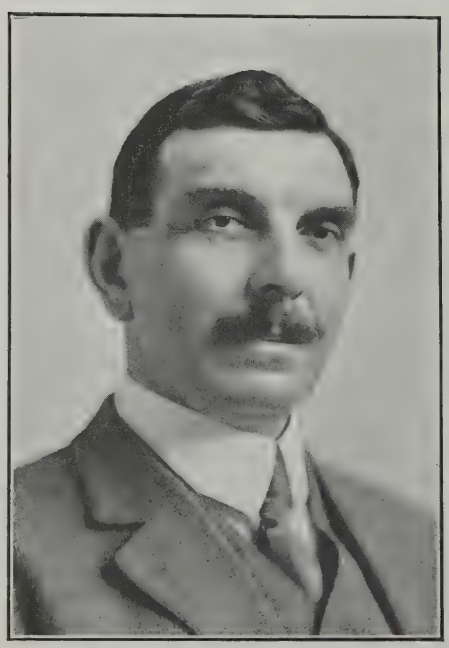
Out-of-work donation frauds are very prevalent throughout the whole of the country. Some hundreds of cases have been referred to the solicitor of the Employment Department of the Ministry of Labor to decide whether prosecution should be instituted in regard to fraudulent unemployment donation claims, and offenders are commonly fined, but in some cases a prison term is their fate. In the budget debate in the House of Commons on the item of £25,000,000 for unemployment donation, several members told of frauds and abuses. In Ireland, it was stated, farmer's sons drove into the towns to collect their doles, and farmer's wives drove in their servants, and waited for them while the girls drew the money. A farmer went into his field, and found that his laborers had gone—they were away, drawing unemployed benefit. Charwomen have stipulated that they should have half-an-hour off in the middle of the day in order to go to the Employment Exchange for unemployed benefit. Four men were seen to drive in a taxicab to a London Labor Exchange. They went to the head of the queue, gave the four leading men 1/- apiece, took their places, went in and signed as being out of work, went out again, jumped into their waiting cab and motored off to the races at Epsom.

A man getting unemployment pay, and fined for gaming, said that he was not looking for work, but was waiting for the Government to find him a job.

One sinner made the collection of the dole a regular business. He registered as an unemployed under false names at several Labor Exchanges, and was in receipt, when caught, of an income from doles of over £7 a week. A laborer drawing £4 a week from his employment, obtained £5-10-0 by false pretenses. Similar cases can be recited to the point of weariness.

"The unemployment donation has ont only been an insurance against Bolshevism"—so asserts the Secretary of the Ministry of Labor—"but it has been an immense advantage to hundreds of thousands of people faced by the spectre of want." Generally it is admitted that the "dole" is right in principle. What has been complained of is the slipshod and slovenly fashion in which it has been administered. But is has been a new idea and fact in Great Britain, and experience teaches. The substitution of work for doles is the ultimate aim.

THE REORGANIZED CANADIAN TRADE COMMISSION



H. B. THOMSON



SIR CHARLES GORDON
Chairman



RHYS D. FAIRBAIRN

The membership of the Canadian Trade Commission, as recently reorganized, consists of Sir Charles Gordon, chairman; Mr. H. B. Thomson, formerly Food Controller; and Mr. Rhys D. Fairbairn, Toronto, the last-mentioned taking the place of Mr. C. B. McNaught. Articles describing the work of the Commission have already appeared in INDUSTRIAL CANADA. It will continue to carry out these plans, working in close association with the Dominion Government, the Trade Mission in London, and the Canadian Manufacturers' Association.

Canadian Manufacturers Association

Officers and Committees Elected for 1919-1920 at the Annual Meeting

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T. P. Howard ..... The Phoenix Bridge & Iron Works, Ltd. . . . . Montreal, Que.

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Second Vice-President

W. S. Fisher ..... Enterprise Foundry Co. ..... Sackville, N.B.

Treasurer

J. F. Ellis ..... Barber-Ellis, Ltd. ..... Toronto, Ont.

Auditor

Wilton C. Eddis.... Wilton C. Eddis & Co. ..... Toronto, Ont.

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Sir Chas. B. Gordon. Dominion Textile Co., Ltd. ..... Montreal, Que.
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C. A. Birge ..... Steel Co. of Canada, Ltd. ..... Hamilton, Ont.
W. K. George..... 59 Yonge St. ..... Toronto, Ont.
H. Cockshutt ..... Cockshutt Plow Co. ..... Brantford, Ont.
R. Hobson ..... Steel Co. of Canada, Ltd. ..... Hamilton, Ont.
R. S. Gourlay..... Gourlay, Winter & Leeming, Ltd.. Toronto, Ont.
E. G. Henderson... Canadian Salt Co., Ltd. ..... Windsor, Ont.

(b) Elective

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A. D. Ganong..... Ganong Bros., Ltd. ..... St. John, N.B.

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Jos. Picard ..... Rock City Tobacco Co., Ltd. .... Quebec City.

Quebec Province

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J. O. Gareau..... E. T. Corset Co., Ltd. ..... St. Hyacinthe, Que.
F. J. Campbell..... Canada Paper Co., Ltd. ..... Windsor Mills, Que.

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Wm. Martin ..... Manitoba Gypsum Co., Ltd. ..... Winnipeg, Man.
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J. Allan Ross..... Wm. Wrigley, Jr., Co., Ltd..... Toronto, Ont.
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(Continued on page 236)

Gillette Safety Razor

The Shaving Service for Every Man Everywhere

In only one period have we sold more Gillette Safety Razors than we did during the War—and that is *since* the War!

In 1914, 1915, 1916, 1917 and 1918, sales climbed steadily,—gathering momentum until we became accustomed to doubling previous records.

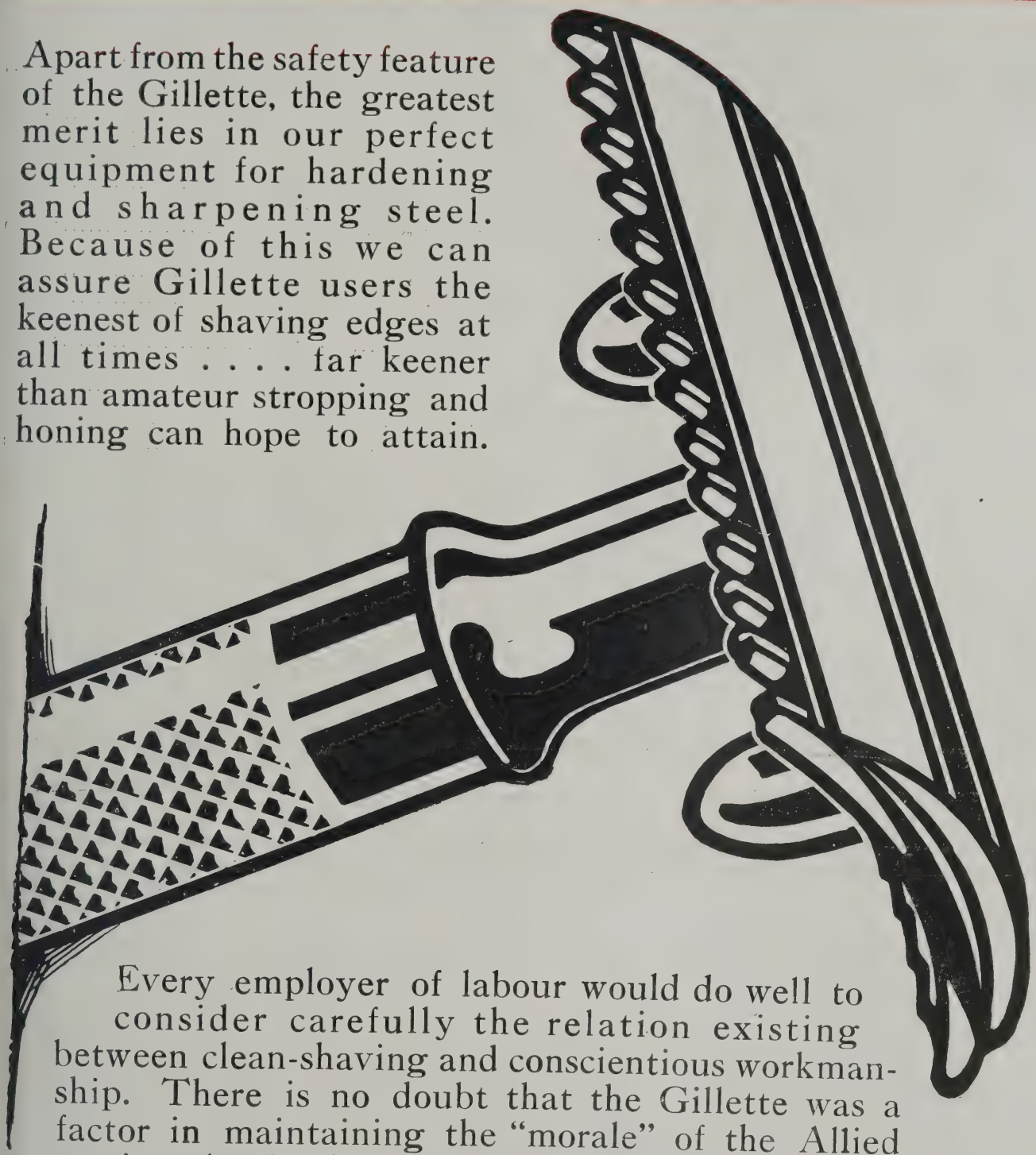
In the midst of disturbances and upheavals we continue to create records, because we have always r garded manufacturing for Export as an essential part of the Canadian program. We certainly made it a part of ours and were prepared to reap a harve t in the Export fields, as we are now doing.



No Stropping —No Honing

that is all taken care of at the factory

Apart from the safety feature of the Gillette, the greatest merit lies in our perfect equipment for hardening and sharpening steel. Because of this we can assure Gillette users the keenest of shaving edges at all times . . . . far keener than amateur stropping and honing can hope to attain.



Every employer of labour would do well to consider carefully the relation existing between clean-shaving and conscientious workmanship. There is no doubt that the Gillette was a factor in maintaining the "morale" of the Allied armies. Apply the principle to the men in your employ and note RESULTS.

Gillette Safety Razor Co. of Canada, Limited
65-73 St. Alexander Street, MONTREAL

MADE IN CANADA
TRADE Gillette MARK
KNOWN THE WORLD OVER

Officers and Committees, C.M.A.

(*Continued from page* 233)

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Frank P. Megan	Wm. Davies Co., Ltd.	Toronto, Ont.
I. H. Weldon	Provincial Paper Mills Co., Ltd.	Toronto, Ont.
J. F. M. Stewart	Point Anne Quarries, Ltd.	Toronto, Ont.
C. Howard Smith	Howard Smith Paper Mills, Ltd.	Montreal, Que.

COMMERCIAL INTELLIGENCE COMMITTEE

E. Holt Gurney (Chairman)	Gurney Foundry Co., Ltd.	Toronto, Ont.
G. W. McFarland	Williams Shoe, Ltd.	Brampton, Ont.
C. G. McGhie	Welland Vale Mfg. Co., Ltd.	St. Catharines.
W. A. Jameson	W. A. Jameson Coffee Co.	Victoria, B.C.
Geo. Henderson	Brandram-Henderson, Ltd.	Montreal, Que.
W. M. Gifford	Northern Aluminum Co., Ltd.	Toronto, Ont.

INDUSTRIAL RELATIONS COMMITTEE

C. H. Carlisle (Chairman)	Goodyear Tire & Rubber Co. of Canada	Toronto, Ont.
H. H. Champ	Steel Co. of Canada, Ltd.	Hamilton, Ont.
Thos. Findley	Massey-Harris Co., Ltd.	Toronto, Ont.
J. R. Duncan	Vulcan Iron Works, Ltd.	Vancouver, B.C.
S. R. Parsons	British American Oil Co., Ltd.	Toronto, Ont.
A. Melville White	Canadian General Electric Co., Ltd.	Toronto, Ont.

According to the by-laws, it is only necessary to nominate six members of the above Committees at the Annual Meeting. At the first meeting of each Committee the six members add to their number and careful consideration is given to the necessity of providing adequate representation to all parts of Canada and to the various lines of industry.

REPRESENTATIVES TO CANADIAN NATIONAL EXHIBITION

W. C. Phillips	Frontenac Moulding & Glass Co., Ltd.	Kingston, Ont.
R. S. McLaughlin	McLaughlin Motor Car Co., Ltd.	Oshawa, Ont.
Jno. R. Shaw	Canada Furniture Mfrs., Ltd.	Woodstock, Ont.

REPRESENTATIVES TO CENTRAL CANADA EXHIBITION

H. I. Thomas	J. R. Booth	Ottawa, Ont.
T. D. McFarlane	McFarlane-Douglas Co., Ltd.	Ottawa, Ont.

REPRESENTATIVES TO THE WESTERN FAIR ASSOCIATION

A. W. White	Geo. White & Sons Co., Ltd.	London, Ont.
W. N. Manning	Sherlock Manning Piano & Organ Co.	London, Ont.

REPRESENTATIVES TO EDMONTON EXHIBITION ASSOCIATION

Geo. C. Robson	W. H. Clarke & Co., Ltd.	Edmonton, Alta.

Steamship Sailings

A Record of Ships Sailing from Montreal During July and Early August

The following announcement of proposed sailings from Montreal is made by the Canadian Pacific Railway Ocean Services in Bulletin No. 11, issued July 4. It will be found useful by manufacturers who are engaging in export business:

Vessel.	Line.	Date. (About)
TO LIVERPOOL.		
Metagama	C.P.O.S. Line	July 11
Megantic	White Star-Dominion Line	July 12
Canadian Ranger	Can. Govt. Merchant Marine, Ltd.	July 15
*Empress of Britain	C.P.O.S. Line	July 16
Corsican	C.P.O.S. Line	July 18
Tunisian	C.P.O.S. Line	July 20
Melita	C.P.O.S. Line	July 24
Rimouski	White Star-Dominion Line	July 25
Canada	White Star-Dominion Line	Aug. 2
Scotian	C.P.O.S. Line	Aug. 7
Grampian	C.P.O.S. Line	Aug. 13
Metagama	C.P.O.S. Line	Aug. 14
* Sails from Quebec.		
TO LONDON.		
Inkula	Cunard Line	July 8
Cornish Point	C.P.O.S.-Furness Line (Furness)	July 10
Batsford	C.P.O.S.-Furness Line (C.P.O.S.)	July 10
Hambleton Range	C.P.O.S.-Furness Line (Furness)	July 17
Verbania	Cunard Line	July 18
Dunbridge	C.P.O.S.-Furness Line (C.P.O.S.)	July 23
Montezuma	C.P.O.S.-Furness Line (C.P.O.S.)	July 24
War Peridot	C.P.O.S.-Furness Line (C.P.O.S.)	July 24
Mattawa	C.P.O.S.-Furness Line (C.P.O.S.)	July 24
Mendip Range	C.P.O.S.-Furness Line (Furness)	July 30
Mottisfont	C.P.O.S.-Furness Line (C.P.O.S.)	Aug. 2
TO ANTWERP.		
War Beryl	C.P.O.S.-Furness Line (C.P.O.S.)	July 29
TO GLASGOW.		
Saturnia	Anchor-Donaldson Line	July 8
Cassandra	Anchor-Donaldson Line	July 15
Montcalm	C.P.O.S. Line	July 19
Holbrook	C.P.O.S. Line	July 26
Saturnia	Anchor-Donaldson Line	Aug. 13
TO AVONMOUTH DOCK (Bristol).		
Monmouth	C.P.O.S. Line	July 13
Ocean Monarch	Cunard Line	July 18
Sardinian	C.P.O.S. Line	July 19
Copenhagen	Cunard Line	July 22
Sicilian	C.P.O.S. Line	July 24
Turcoman	Dominion Line	July 31
TO MANCHESTER.		
Manchester Mariner	Manchester Liners	July 19
TO HULL.		
Sidlaw Range	Furness Line	July 10
TO LEITH.		
Cairndhu	Thomson Line	July 18
Cairnmona	Thomson Line	July 25
Cairnvalona	Thomson Line	July 28
TO DUBLIN.		
Fanad Head	Head Line	July 20
TO BELFAST.		
Carrigan Head	Head Line	July 8
Ballygally Head	Head Line	July 18
TO ST. NAZAIRE (France).		
Alston	Canadian-French Line	July 6
TO HAVRE (France).		
Bilster	Canadian-Trans-Atlantique Line	July 18
Lord Dufferin	Canadian-Trans-Atlantique Line	Aug. 1
California	Canadian-Trans-Atlantique Line	Aug. 9
TO BUENOS AIRES AND MONTE VIDEO.		
Clan MacWilliam	Houston Lines	July 10
Canadian Miller	Can. Gov. Merchant Marine, Ltd.	July 12
TO SOUTH AFRICA. Cape Town, Port Elizabeth, East London, Durban and Delagoa Bay.		
Kwarra	Elder Dempster Line	July 15
New Brunswick	Elder Dempster Line	July 25
TO AUSTRALASIAN PORTS. Melbourne, Sydney, Auckland, Wellington, Lyttleton and Dunedin (Port Chalmers).		
Waipara	New Zealand Shipping Company	July 18
Kumara	New Zealand Shipping Co.	Aug. 2
TO BARBADOS, TRINIDAD AND HAVANA (Cuba).		
Canadian Warrior	Can. Govt. Merchant Marine, Ltd.	July 12
TO KINGSTON (Jamaica).		
Canadian Trader	Can. Govt. Merchant Marine, Ltd.	July 19
TO CHARLOTTETOWN, SYDNEY, ST. JOHNS, Newf'd.		
A Steamer	Gulf of St. Lawrence Shipping & Trading Co.	July 15

An Important Development

Progress Being Made by General Motors in Their Canadian Program

In order to keep pace with the growing demand for General Motors cars in Canada the corporation is building extensive manufacturing plants in Walkerville, Ontario. The enterprise is being incorporated as Canadian Products, Ltd., Division of General Motors of Canada, Ltd. At the outset motors and axles will be manufactured for McLaughlin-Buick, Chevrolet 490, Chevrolet FB., and Oakland Six cars, and other parts and other models will be taken on later. The construction of the plants is already well under way and temporary offices were opened on the first of July in the motor plant, where all purchasing of equipment and materials and the employment of personnel will be handled. Major Howard E. Blood is General Manager.

The Walkerville development is part of a larger Canadian program of the General Motors, evidenced by the recent formation of the General Motors of Canada, Ltd., of which Mr. R. S. McLaughlin is President, with headquarters at Oshawa, Ont. The assembling of General Motors cars will continue to be handled at Oshawa as heretofore.

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OTTAWA

A Novel Wage Plan

How the Oneida Community Limited has Succeeded in Evolving a Sliding Scale of Wages

Among companies which report a successful development of a form of profit-sharing with their employees is the Oneida Community, Limited. Their wage plan, which is in force at all of their American factories as well as at the two Canadian plants at Niagara Falls, Ont., is described in some detail in a booklet recently issued. The company disclaim any idea of having worked out a general formula applicable to other industrial groups, but report that in their own case and under their own peculiar conditions, its success has been little short of phenomenal.

The scheme is not specifically one of profit-sharing, the company believing that much very substantial "sharing" should be done through the medium of wages before more ingenious and doubtful schemes are undertaken. They have aimed to reduce as far as possible inequalities of reward by increasing the minimum wage as fast as possible. Thus they have reduced, as far as possible, special privileges and have shared whatever prosperity has come to the company with everyone connected with it. Finally, they have gone very carefully into the subject of protecting standards of living. It was in connection with the latter that what is known as "The High Cost of Living Plan" was evolved. This was put into effect on January 1, 1917.

"As a basis," state the company, "we went back to January, 1916, when a general wage advance had placed our employees (as all agreed) in a position of sharing the Company's prosperity. A careful estimate applied to the living expenses of a large number of families of differing size and income, indicated that the rise of living cost in our community during 1916 was about 16 per cent. We therefore announced:

"1. That during the war, and until a period of settled prices had been reached, basic wages would be left as in January, 1916.

"2. That a separate envelope would be given to each employee containing an additional wage which for January would be equal to 16 per cent. of the regular wages.

"3. That the wages in this special envelope should change each month with the change in the average cost of living.

"4. That every 20 point change in Bradstreet's Index Number of about one hundred commodities would be assumed as indicating a change of 1 per cent. in the average cost of living, the nearest 5 points being considered equivalent to ¼ of 1 per cent. in actual practice.

"5. That each month the latest Bradstreet number when published, would be posted on factory bulletin boards, together with the change of wages indicated for the following month by this change of index number.

"The fact that more than two thousand workmen after two years of experience with the operation of this plan, agree that the 'H. C. L.' envelope has fully covered increases in their living costs, has given us great confidence in the practical value of the figures used.

"The economic result of this plan in our own industrial group has been to combine security and contentment for employees with financial safety for the institution. Factory operation during the war has been wonderfully benefitted by the spirit of enthusiastic co-operation engendered, and by the absence of those disorganizing and depressing periods of wage discussion and wage crises so inevitable where no automatic plan of adjustment is provided. Our employees have felt that however high the price of flour or potatoes might go, their wages would increase to cover the increased cost.

"It remains to note that already a substantial fall in the 'H. C. L.' percentage has taken place during the past few months, and that the attitude of those subject to this automatic reduction is reliably reported to be everything which the most enthusiastic believer in industrial partnership could wish."



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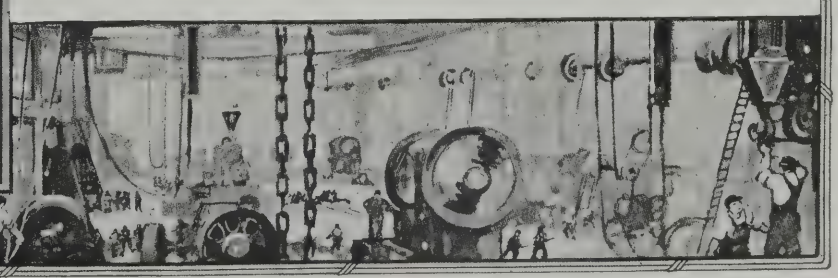
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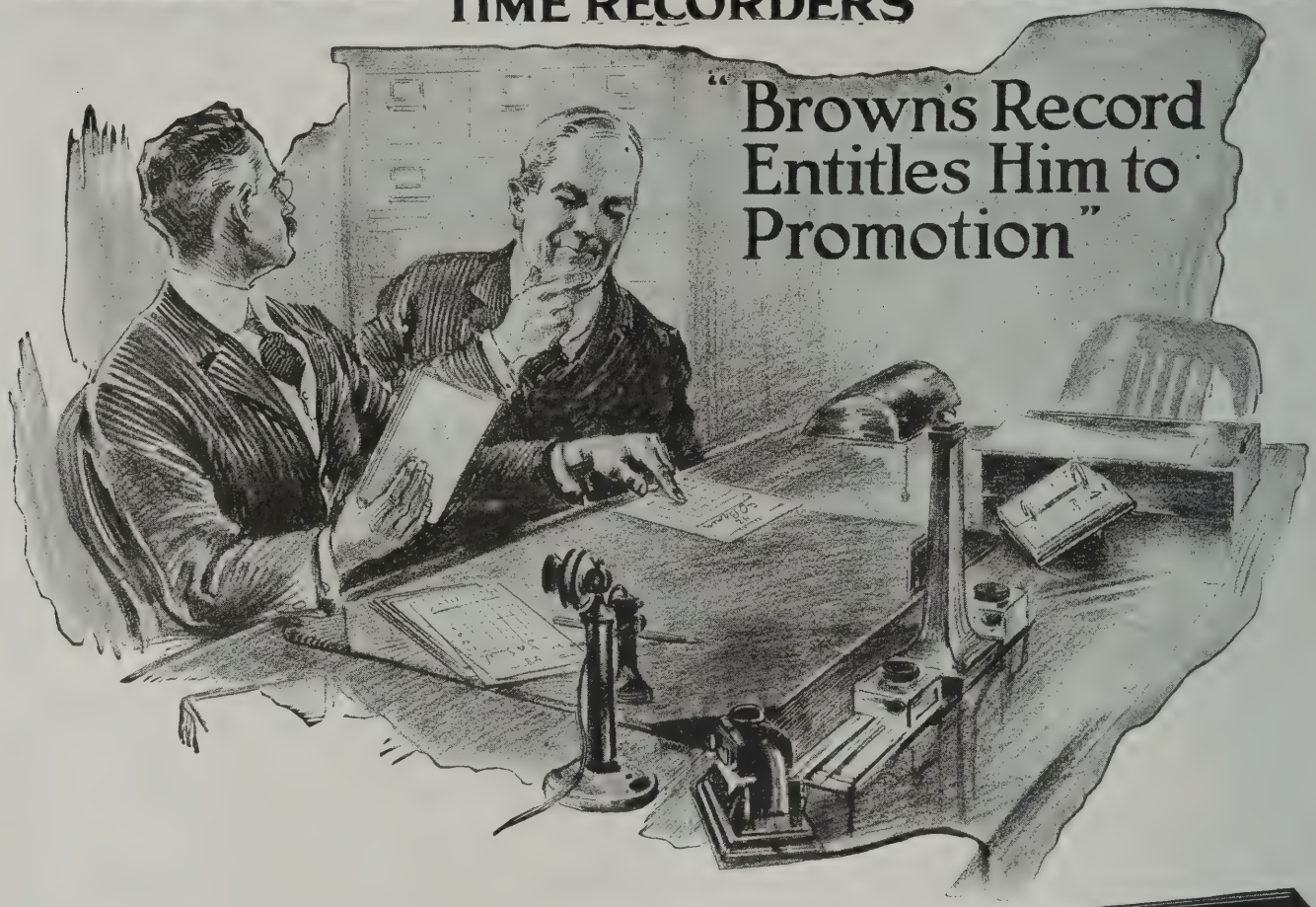
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- Industrial Signals
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The Right Way—No Crowd—a "stream"

A Chance for a New Industry in Canada

Biological Products for Use in Veterinary Practice are for the Most Part in the Hands of Foreign Firms—The Financial Aspect of the Situation—A Good Future before these Biological Products as the Live-Stock Industry Expands

By LYMAN B. JACKES

THERE are great annual losses amongst Canadian live stock due to the activities of micro-organisms and listed under the somewhat broad heading of contagious diseases. Science alone can eradicate these losses and in the reconstruction and conservation of our live stock industry, which must come, it is well to enquire into the vast sums of money that are leaving Canada annually for the United States in payment of veterinary products, including vegetable, chemical and biological substances. The sum representing the annual sales of these imports goes well into six figures and the value of the biological output cannot be far short of three quarters of a million annually and is steadily growing. The competition towards the imported veterinary products under the heading of vegetable and chemical substances is a matter that rests entirely in the hands of the Canadian drug houses.

The manufacture of veterinary biological products is almost entirely under the thumb of five or six firms in the United States. I say almost entirely; for we must take into account the efforts of the Health of Animals branch at Ottawa which is now supplying vaccine for protection against blackleg and strangles. The output, speaking entirely in a commercial manner, of this institution is limited to two lines while the output of the foreign private firms exceeds two dozen different lines. The institute at Ottawa are conservative in that they are disposing only of lines on which they have definite experimental data of their own on which to make specific claims regarding merit.

Nature of the Products

On the other hand, it is not likely that the private foreign firms would maintain departments in their distributing houses and circulate expensive literature if their products were not enjoying an expanding patronage based to a considerable extent on merit. These products include treatment under the three headings, prophylactic, curative and diagnostic and include hog cholera, anthrax, influenza (equine), white scours, tentanus, contagious abortion, joint-ill, blackleg, canine distemper, enteritis, hepatic abscess, hemorrhagic septicæmia, infected wounds, rabies, mallein and tuberclin. These may be classed as modern products, but medicine to-day is following rapidly on the lines opened up by the disclosures of the microscope and the immediate future will see much greater developments along this phase of veterinary treatment.

Broadly speaking these products are divisible into two headings,—vaccines and serums. The characteristics of a vaccine and a serum are somewhat different, but in a general way it may be taken that a vaccine contains dead bacteria suspended in a liquor containing the toxins developed during the life of the organism. They are used chiefly as prophylactic agents or preventatives amongst animals that have not yet contracted, but are exposed to, the specific disease for which the vaccine is manufactured. The serum contains the chemical output of certain cells of the animal economy suspended in blood washed free from corpuscles. This chemical activity is stimulated by producing a toxæmia, under control, in an animal and drawing off a limited amount of the blood when conditions warrant the same. The serum has an affinity and a neutralizing faculty for toxins and is introduced into an animal that has developed symptoms of a contagious disease which will respond to the specific serum available. Some idea of the financial aspect of the sale of this material may be gathered from the fact that a small package containing three doses of prophylactic vaccine against contagious abortion (one cow or one mare being treated) sells for two dollars in Canada. On the other hand the material listed as tetanus antitoxin, used for the treatment of tetanus or lock-jaw in horses, sells for three dollars for five thousand units. The treatment for a large horse would require from seventy-five thousand to one hundred thousand units.

Requisite Equipment

The necessary equipment for the manufacture of these veterinary biological products would include a sanitary premises, open to all possible sunlight, stables, glass blowing apparatus, sterilizing apparatus, incubating rooms, and the usual equipment of a bacteriological laboratory such as glassware, microscopes and media materials. In giving the equipment any consideration it must be born in mind that there are three important stones in the foundation of success other than first class equipment. These embrace the supervision of a skilled veterinary bacteriologist, a skillful and scientific display and distribution of advertising literature and the means for an economical and rapid distribution of the finished product.

From a year to a year and a half would elapse before a successful competition could be inaugurated, as a museum of strains of organisms would be required and these should be isolated and cultivated from Canadian sources. Considerable experimental work would be necessary following this preliminary work. There is some evidence to show that certain failures of the imported products are due to the use of organisms isolated at points far removed from the outbreak which has indicated a need for the use of these products. Some means for coming in contact with diseased animals for testing and experimental work is essential.

Financial Aspects

Returning to an approximate consideration of the financial aspect, let us take the case of a vaccine against equine influenza. It is not difficult to manufacture, and a batch of some magnitude could be turned out with a splendid margin at seventy-five cents a dose; the price asked for the imported equine influenza vaccine in this country. Serums are somewhat more difficult to manufacture and standardize, but in large quantities would still yield a good margin between cost and sale, though perhaps not so great as in the case of vaccines. The Federal Government in Australia erected an institute for the manufacture of biological products in a competitive way with English and United States houses and it is reported from the best of authority that the returns in two years totalled $210,000. with a handsome margin over production cost. It is also no secret that one or two small private concerns in Australia that have been limiting their

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efforts to the production of anthrax prophylaxis have amassed a credit balance in the bank that is worth serious study.

Returning to Canada, it is reported from good authority that the annual sale of blackleg and strangles prophylactic from Ottawa returns from twelve to fifteen thousand dollars a year and may reach as high as twenty thousand dollars. In a recent twelve months this department was able to compete on the home market against foreign competition to the extent of one hundred and twenty thousand doses of blackleg and thirty-five hundred doses of strangles vaccine. One of the large United States houses enjoying a goodly share of the returns from this material used in Canada succeeded in enlisting the services of a former veterinary biologist of the Health of Animals branch at Ottawa. It was reported at the time that a branch laboratory was to be opened in eastern Ontario, but after six months' activities the gentleman went over to the States and joined the staff of the home laboratory. The eastern Ontario plant was transformed to a distributing house. The motive for this would be interesting to learn; but doubtless it would be that manufacture in a central depot could be carried on at less expense than the maintenance of two establishments.

There is a good future before these biological products and their commercial aspect is well worth serious study.

Course in Employment Management

Social Service Department of University of Toronto Makes an Interesting Announcement

An announcement, which should have interest for many of the readers of INDUSTRIAL CANADA, is just being made by the Department of Social Service of the University of Toronto. It is to the effect that in September a short course on Employment Management, lasting from three to four weeks, will be given at the University.

Instruction will be given daily, one hour being devoted to each of the three main divisions into which the course falls. These are:

(1). *Personnel Management; Principles and Practice;* including methods of securing, selecting, promoting and transferring employees, trade tests and rating scales, job analysis and personnel specifications, organization and work of a personnel office, labor turnover and its reduction, etc.

(2). *Industrial Psychology*: The application to business of modern psychology, ways of learning and of teaching business processes, intelligence tests and their application to industry, influences making for harmony or disharmony, cooperation or antagonism within industry, etc.

(3). *Economic Principles and Methods involved in* (1) and (2). Causes which have brought about the present economic situation, wage determination (various plans), labor problems and proposed solutions, labor organizations, labor laws, etc.

The course will be given both afternoons and evenings if the enrolment is sufficient. Both principles and practice will receive detailed discussion throughout, and opportunity will be provided for the application of the knowledge acquired.

The Department is fortunate in having secured the services of two recognized experts in this new and important subject, viz., Lieut.-Col. John J. Coss of Columbia University, who both as a teacher of this subject and as a member of the War Industries Board of the United States, has been intimately connected with the theory and the practice of personnel management, and Dr. E. K. Strong of the Carnegie Institute of Technology, Pittsburg, who, besides direct business experience has had unusual opportunities for studying the application of psychology to industry, most recently as a member of the Committee on the Classification of personnel in the U.S. army. He is also professor of Vocational Education at the Carnegie Institute, and has contributed a number of valuable publications to the subject of industrial psychology.

It is hardly necessary at the present day to point out the importance of employment management. The growth of the profession of employment management is due to the realization of the fact that the conditions under which men and women work in industry—the conditions under which they are hired, tested, and fitted to their respective jobs; the conditions on which their efficiency, their interest and cooperation depend; the conditions which ensure their health, stability, and general welfare as workers are of the first importance, even from the economic as well as the social point of view. If it requires a trained and qualified executive to handle sales or advertising, no less does it require a trained and qualified executive to supervise, adjust and direct the personnel. The latter training should be of a broader and more liberal character. It cannot be obtained merely from the experience of other business activities, or even from the routine functioning of an ordinary employment department. It is, therefore, best given through a recognized educational authority. The Department of Social Service of the University of Toronto has been requested to provide a beginning in such instruction, and to that end is offering, for the first time in Canada, a short course of specialized training.

A detailed programme of the course will be issued at the end of July. This and any other information can be obtained on request sent to the Secretary, Department of Social Service, University of Toronto. A small fee is charged for the course. Applications for enrolment should be sent to the same address.

Extension to Paper Mill

New Finishing Room and Storage and Shipping Building for Laurentide Co.

The Laurentide Company, Limited, of Grand Mere, Que., is making additions to its plant. These consist of a new finishing room, a steel bridge and a storage and shipping building. The work has been started on the new finishing room and the company will proceed soon on the erection of the elevator shaft and the construction of the steel bridge and shipping building. The purpose of these improvements in the company's plant is to have the best facilities possible for the handling of their paper from the paper machines to the railroad shipping point in the yard.

As described by the *Contract Record*, the first building, which is the finishing room, has concrete foundations, brick facing and steel superstructure. Inside of the building there is room for the elevator shaft. This shaft is about 120 feet high. The capacity of the elevator will be about six 90-inch paper rolls or twelve 45-inch rolls. The paper will be delivered to a steel bridge connecting the elevator to the storage and shipping building. Its length is 170 feet by 31 feet wide. The last ninety feet of the bridge will contain scales for weighing the paper rolls and will provide space for wrapping them. This section is to be called the wrapping aisle. The bridge is of the lattice braced girder type, and is supported on a central column of steel resting on a concrete pier.

The new storage and shipping building will be 92 feet wide by 280 feet long. Its foundations will be of concrete, the walls of solid brick and the superstructure of steel. The flooring will be of concrete on steel I-beams. The building is so designed that the maximum trucking space will be approximately sixty feet in length. An electric hoist will be installed to handle the paper rolls to the cars.

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TO uphold the Glory we have jointly earned—to honor our noble dead—to comfort the wounded, and extend to the men returned the hand of prosperous welcome, we must cast aside all forebodings and face the future with unbounded courage and confidence and, without a shadow of doubt, declare to the World that this Nation, which was so quickly and successfully transformed to a War basis, can be depended upon to revert to Peace conditions with equal success. The buyer and seller must recognize their duty to the Nation and co-operate fully to the end that all products that can be produced in Canada by Canadian workmen shall not be purchased elsewhere.

OUR Duty is plain; Canada with Canadian labor and capital can produce, manufacture and distribute products sufficient to keep the wheels of industry turning to the limit. The song of Prosperity and Happiness should ring out all over the land. Let us sincerely pledge to the extent of our needs, to purchase materials produced in Canada by Canadian Workmen, and the result of our efforts will return to us the Blessings of a Prosperous and Happy Nation.

THE
STEEL COMPANY
OF
CANADA
LIMITED
HAMILTON MONTREAL

RAILROAD TRACK MATERIAL
Angle Bars
Track Bolts
Tie Plates
Tie Rods
Spikes

WROUGHT PIPE
Black Pipe
Galvanized Pipe
Nipples
Couplings

LEAD PRODUCTS
Lead Pipe
White Lead
Shot
Putty

WIRE
Steel & Brass
Copper & Bronze
Heavy and Fine
Bright Annealed
Coppered
Galvanized and Tinned
Stranded
Steel and Copper Cable
Clothes Line
Staples
Barb Wire
Woven Wire
Fencing
Fence Gates

Bars
Blooms
Billets
Wire
Wire Rods
Sheets
Horse Shoes
Angles
Channels
Plow Beams

WE DO
CONTRACT WORK

Machine Shop
Blacksmith Shop
Wood Pattern
Sheet Metal
Planing Mill
Grey Iron Castings

Canadian Rumely Co., Limited
48 Abell Street, Toronto

We give SERVICE

SPECIAL CEMENTS
for
SPECIAL PURPOSES

Acid Resisting
Stove
Furnace
and
Retort

ASBESTOS CEMENTS

Stove—Boiler
PUTTIES

G. F. STERNE & SONS
Brantford - - Canada

Merchandise Marks

Regulations Issued by the British Customs Regarding Goods Imported Into the United Kingdom

The following memorandum regarding merchandise marks was issued by the British customs:

1. Foreign goods imported into the United Kingdom which do not bear any marks whatever, either on the goods themselves or on the packages or wrappers containing them, are not required to bear any qualifying statement or indication, such as "Made abroad," "Made in Japan," etc.

2. Foreign manufactured goods bearing a name or trade mark, being, or purporting to be, the name or trade mark of a manufacturer, dealer, or trader, in the United Kingdom, must have that name or trade mark accompanied by a definite indication of the country of origin of the goods. The name of the country is a sufficient indication, without the words "Made in," if a name or trade mark only appears, e.g., "John Smith, Holland," would be satisfactory. If such a mark as "John Smith, Sheffield," is used, then the qualification must be "Made in Holland," or similar wording.

3. If foreign imported goods bear the name of a place identical with, or a colourable imitation of, the name of a place in the United Kingdom, the name should be accompanied by the name of the country in which the place is situated. Thus Boston, in Massachusetts, should be accompanied by the name "United States," or by the initials "U.S.A."

4. If a trade description includes the name of a place, and the goods on which it appears are not the produce of that place, or of the country in which it is situated, the trade description must be accompanied by a statement indicating the actual country of production. For instance, a wine, the produce of California, and described as "Sherry" (which word is derived from the name of the place Xeres), should have that description accompanied by the statement "Produced in California," or should be described as "Californian Sherry." An exception to this rule is made in cases where the name of a place in a trade description is indicative merely of the character of the goods, and is not calculated to mislead as to the country of origin. Thus such a description as "Brussels Carpet," or "Portland Cement" need not be accompanied by a statement of the country of actual production, unless as required under paragraph 2 above.

5. Trade descriptions in the English language applied to foreign goods imported for home use from non-English-speaking countries are not regarded as indirect indications that the goods are of British or Irish origin, unless the officers have good ground for considering that such trade descriptions are specially designed to convey, and do in fact convey, an impression of British or Irish origin for the goods.

Trade descriptions on imported goods in a foreign language, which is not that of the country from which the goods are imported, must be accompanied by a statement of the actual country of production of the goods, e.g., "Made in Portugal."

6. As regards watches, any mark on the case is deemed to extend to the watch. If, therefore, a watch case is made in this country, and bears any statement or indication of such origin (as, for instance, a British assay mark), and the watch itself is made in Switzerland, then there must appear either—

(*a*) in close proximity to the assay mark a conspicuous statement that the watch is of foreign make, or

(*b*) on the dial and also on the top or bottom plate of the movement, visible between the bridges, an indelible statement or indication that the watch is of Swiss origin.

7. All qualifying statements or indications must be distinct, in equally conspicuous and indelible characters with, and in close proximity to, the marks they are intended to qualify.

8. Marks on samples or patterns, whether of British or foreign manufacture, are not required to be accompanied by any qualification, provided such samples or patterns are valueless in themselves, do not form whole or complete articles, and can be readily distinguished as samples or patterns.

Mr. Robt. K. Newton, formerly Assistant Manager of Sales, at Brown's Copper and Brass Rolling Mills, Limited, New Toronto, Ont., was appointed to the position of General Sales Manager on July 1st.



FOR OVER SIXTY YEARS the predominating principle that has governed us in all our business dealings and one that has helped us to win and hold the confidence of the general public and the trade has been the policy of "Square Dealing." Absolute honesty of purpose and good service, backed by goods of merit, have combined to place us in the front rank as manufacturers of high-class brushware.

THE BOECKH TRADE MARK

the symbol of quality and dependability is zealously guarded by us, and any product that bears our imprint carries also with it a guarantee of the best workmanship, and the best of material.

Satisfactory service—quality—the best, and reasonable prices have created the demand for Boeckh's Brushes that dealers should make use of to their advantage.

Your enquiry regarding our products will receive our immediate and prompt attention. We will be pleased to supply you with display cards, advertising matter, etc. Write us in connection with your requirements.

THE BOECKH COMPANY, LTD.

TORONTO - CANADA



Consider Them As an Investment

Consider these new "Office Specialty" Counter Height Filing Sections in the light of an investment that pays you real dividends in actual money saved.

In the first place "Office Specialty" Counter Height Filing Sections serve all the purposes of high-grade filing cabinets. And in addition they combine the function of an office counter. That's where your first dividend comes in—you save, in first cost, the price of a counter.

On top of this there's your dollar-and-cents saving represented by the floor space conserved. And at the prevailing rate of rentals this saving means quite a repectable figure on your bank balance.

COUNTER HEIGHT SECTIONS

If this were all the service these Counter Height Filing Sections performed you would even then be getting double value for your money.

But they do more.

They act as department divisions in an office when stacked together as shown in the illustration.

Any record in his department is available to the executive in half the time it would take the filing clerk to walk to the filing room.

So besides the known savings they effect in space—and consequently money—they enable your clerks to get papers and records for you quickly—they save your time and the time and energy of your staff.

Tell your stenographer to type a memo today for descriptive folder "The Conservation of Space in Your Office." It's free.

958

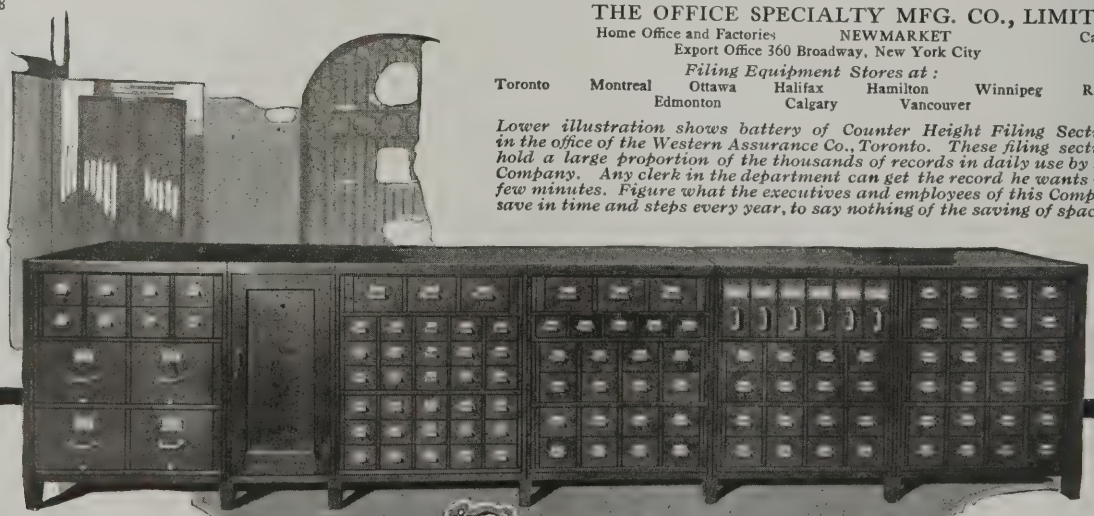
THE OFFICE SPECIALTY MFG. CO., LIMITED

Home Office and Factories NEWMARKET Canada

Export Office 360 Broadway, New York City

Filing Equipment Stores at :

Toronto Montreal Ottawa Halifax Hamilton Winnipeg Regina Edmonton Calgary Vancouver



Lower illustration shows battery of Counter Height Filing Sections in the office of the Western Assurance Co., Toronto. These filing sections hold a large proportion of the thousands of records in daily use by this Company. Any clerk in the department can get the record he wants in a few minutes. Figure what the executives and employees of this Company save in time and steps every year, to say nothing of the saving of space.

OFFICE SPECIALTY

LABOR SAVING OFFICE DEVICES "Y and E" TIME IS MONEY

FILING SYSTEMS

Cable Address : "Timber" Established 1865 Post Office Drawer 500

The British Columbia Mills Timber & Trading Company

Head Office - Vancouver, B.C.

Branches : Hastings Saw Mill, Vancouver. Moodyville Saw Mill, Burrard Inlet
Sales Office for Northwest: 603 McIntyre Block, Winnipeg, Manitoba

MANUFACTURERS AND SHIPPERS BY RAIL AND WATER OF

Fir, Cedar Spruce and Hemlock Lumber



Lath Pickets Shingles Mouldings Etc.

Loading timbers at the Hastings mill wharves, the large proportion of them being from 65 to 110 feet long, and from 12 x 12 to 24 x 24 inches square. Cargo over 4,000,000 feet board measure. As far as is known this is the largest cargo on any one vessel cut and loaded by any one mill on the Pacific Coast.

Rail Shipments to All Parts of Canada
Spars and Long Timbers a Specialty

For over Fifty Years ***THE HASTINGS SAW MILL*** has been manufacturing and Shipping Cargoes to U. K., South Africa, Australia, South America, China, Japan, and other foreign countries.

ENQUIRIES SOLICITED PROMPT DELIVERY
OUR TRADE-MARK H.S.M. IS A GUARANTEE OF GRADE
VESSELS CHARTERED TIMBER LANDS FOR SALE

Codes Used : A 1, A B C, Watkins, Telecode, Western Union

AMONG THE INDUSTRIES

Under this heading are published items of news of current interest concerning the activities of Canadian manufacturers. Information about changes of interest, enlargement of plants, and plans for future developments are welcome, and are published free of charge, provided they should not be properly classified as advertisements

***Items prefixed with an asterisk are based on official information received in each case from the companies mentioned. Other items, while secured usually from reliable sources, have not the same authoritative origin**

BRITISH COLUMBIA.

Kamloops.—The Kamloops Board of Trade is looking into the possibilities for establishing a woollen industry in Kamloops for the manufacture of yarn and cloth from wool produced in British Columbia.

New Westminster.—The Beaver Cigar Factory, of New Westminster, has transferred its headquarters to Vancouver. The Vancouver plant is located on Cambie Street, and the staff of the New Westminster plant will work in Vancouver until a smaller building is found for continuing the New Westminster plant.

A number of returned soldiers, backed by considerable capital, are planning the establishment of a new industry at New Westminster, which will import and handle India and Oriental hardwoods, and will erect a large new factory in which these imported hardwoods will be made up into artistic and durable furniture, states "Industrial Progress" for June. The company proposes to import especially teak and ebony from India, which can be laid down at New Westminster at from $70 to $100 per thousand feet, and can be retailed at $300 per thousand feet and even higher when made into furniture. It is believed that the enterprise will develop into a large manufacturing industry employing many expert workmen.

Queensborough.—The British Columbia Manufacturing Company have, after a year's effort, succeeded in getting a permit from Ottawa to build its new export plant on the site leased from the Provincial Government at Queensborough, on what was formerly the provincial jail farm. The plant will be entirely equipped for the export business. There is at present stacked up at the plant some $20,000 worth of box shooks, destined for Australia and awaiting ship space. The plant will be in competition with plants in Japan and in the Baltic, but the present tonnage rates makes the British Columbia trade prohibitive in competition with Japanese trade.—"Industrial Progress."

Sidney.—The Sidney Rubber Roofing Co. of Sidney, B.C., is considering plans for additions to the present plant, to cost approximately $125,000.

Vancouver.—The Canada Carbide Co. contemplate the establishment of a plant in this city.—Robertson-Hackett Saw Mills, Ltd., will erect an electric-driven planing mill at False Creek at a cost of $40,000.—Under the name of the Canadian Western Cordage Co., returned soldiers of Vancouver have formed a company and will erect a plant and machinery to cost about $250,000, on the banks of the Frazer River at New Westminster. The intention is to make rope and twine.

The Electric Manufacturing Co., Alexander Street, have completed arrangements for the erection of a new factory on a site which has been leased from the Harbor Commission on Industrial Island. The factory building proper will be 110 x 50 feet in size, of heavy mill construction, covered with galvanized steel. Extra full equipment of machinery and plant has been ordered for the manufacture of heavy type slate back switches, and also the new type of externally operated switches.

Architects Gardiner & Mercer, Vancouver, have been receiving tenders for the construction of a new plant and buildings for the Mainland Engineering Co., to be erected on Coal Harbor. Work has already been done on the pile-driving and foundations and work on the plant proper will start immediately.

The Rothert Process Steel Co., of Seattle, has applied to the Provincial Government, requesting it to guarantee bonds amounting to $300,000, on condition that the company shall use the money to move its plant from Seattle to Vancouver or its vicinity, and shall purchase and erect other furnaces and machinery which, the company claims, will place it on a profit-earning basis. The company is making high-grade tool-steel at its Seattle plant from the titaniferous magnetites of Texada Island, in an electric furnace, and it claims it is producing incomparably the best tool-steel in the world.—"Industrial Progress."

SHOW YOUR SAMPLES UNWRINKLED

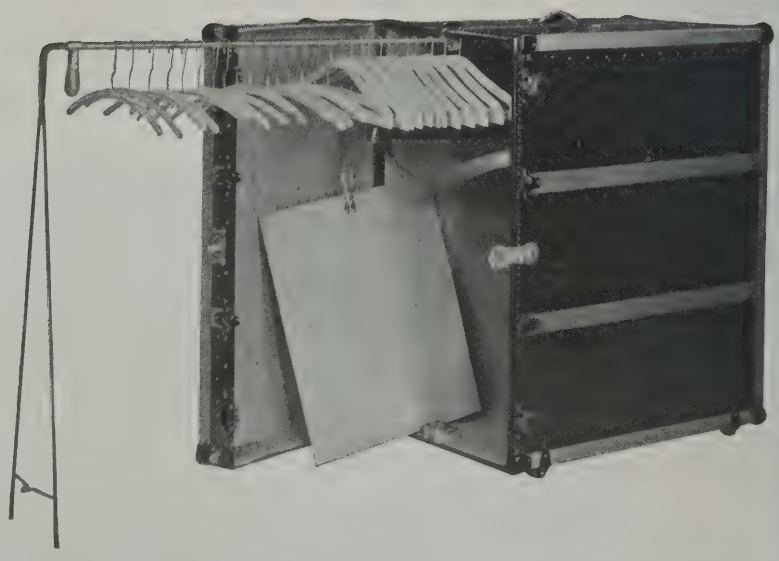
WARDROBE TRUNKS

for Suits, Coats, Dresses and Waists

WE MAKE
SAMPLE TRUNKS
AND CASES
FOR EVERY
BUSINESS

Let us know your needs and get our prices.

The M. Langmuir Mfg. Co. of Toronto Limited





"MORROW"

Whenever you see this name on an original container of Set Screws, Cap Screws, Twist Drills, Files, you know that these manufactures are produced by a firm of highest integrity, and that what you buy from them is always the best of its kind obtainable anywhere.

"These Lines are Carried by Reliable Jobbers"

John Morrow Screw & Nut Company, Limited

INGERSOLL ... CANADA

ALWAYS SPECIFY "MORROW'S"

Made just a little better than seems necessary

Carhartt Overalls

FOR MEN AND WOMEN

Hamilton Carhartt Cotton Mills Limited

"TORONTO UNIT"

TORONTO MONTREAL WINNIPEG VANCOUVER and LIVERPOOL, ENG.



Try Chiclets after smoking

Just when the stress of work is most severe—try a Chiclet—dainty, candy-coated, with a *zip* of peppermint. It relieves the tension.

SMOKERS, try one of Adams Chiclets when you've finished smoking — or between smokes. You'll find the change pleasant—and beneficial—sweetens the breath also.

CHICLETS are sold everywhere. Next time you see Chiclets displayed leave a nickel and get ten Chiclets.

MADE IN CANADA

—an Adams product, particularly prepared

ADAMS
Chiclets
CANDY COATED GUM

Canadian Chewing Gum Co., Limited
Toronto, Winnipeg, Vancouver

The British Columbia Hardwood Floor Co. will start work immediately at Granville Street, Vancouver, on the construction of a new factory and storage building, covering a ground area of 25 x 120 feet at 2617 Granville Street. It will be a two-story frame structure.

The Vancouver Shipyards, Ltd., are making extensive improvements to their plant on Georgia Street West, included in which will be the erection of a frame building 300 x 30 feet in size, at a cost of $4,000.

Good progress is being made with the erection of the new Coca-Cola building on Richards Street, Vancouver, which, it is expected, will be ready for occupancy in the early summer.

A building to be used exclusively for manufacturing purposes is being erected on Richards Street, Vancouver, by A. E. Solloway, covering an area of 25 x 110 feet, of brick and tile construction.

The shipbuilding plant of the Harbor Marine Co., Ltd., on the Songhees Reserve, is practically completed, and the commencement of shipbuilding operations will be under way as soon as the necessary steel is delivered. There will be two shipways, which will be served by a huge travelling crane, operated on tracks running between the two shipways. This crane will be able to transfer plates from the plate yard on the high bluff to any place within a radius of the two ships.

MANITOBA.

St. Boniface.—The Clare Milling Co. will shortly invite tenders for a $375,000 flour mill.

NEW BRUNSWICK.

Chipman.—A serious fire visited the sawmill of the Sayre & Holly Lumber Co. recently, when damage was done to the extent of $140,000, and between two and two and a half million feet of lumber valued at $80,000 went up in smoke. The lumber is covered by insurance, but the mill, valued at $60,000, is only about half covered. It is understood that the company will rebuild on the same site. The fire did not affect the engine and boilers, which are contained in a fire-proof building, and a steady stream of water, which the pumps poured on the surrounding structures saved the village of Chipman.

Milltown.—The St. Croix Cotton Co. has purchased the water privilege at Salmon Falls, and intends this summer to build a power plant in Calais to run the entire plant by electricity. It is understood that this mill has under consideration a large addition to its factory.

Moncton.—A new factory, to cost in the neighborhood of $35,000, will be erected for A. Humphrey & Son, Ltd.

Newcastle.—The fire which broke out in the lumber storage of the Edward Sinclair Co. mill, near Newcastle, did damage amounting to about $150,000.

NOVA SCOTIA.

Bear River.—The firm of Clarke Bros., Ltd., has been reorganized under a Dominion charter, and will embark in the sulphate pulp business. The firm has been in business for thirty-five years, originally as a partnership of W. G. Clarke & W. W. Clarke. Lumber, sash, doors, wood finish and hardwood products of various kinds have been manufactured. A sulphate pulp mill of 10,000 tons annual capacity will now be erected, and an additional sawmill of six million feet added to the existing plant. A. G. McIntyre, a prominent figure in the pulp and paper industry, becomes president of the company and managing director of the pulp division.

ONTARIO.

Bancroft.—The Canada Marble Co. contemplate erection of a plant in this town. Estimated cost, $500,000.

Brockville.—The Board of Trade has purchased twenty-four acres of land, which it intends to dispose of to United States manufacturers for factory sites.

Elmira.—Contract has been let for a factory addition and warehouse for the Great West Felt Co.

Goderich.—Plans are prepared for $15,000,000 steel plant for Lake Huron Steel Corporation. The harbor will be enlarged and dredged; Hydro power line will be built and extensive building operations are planned.

The Convertible Tractor Corporation of St. Paul, Minn., may erect a Canadian branch here.

Guelph.—Among recent building permits was one for $45,000 for addition to the Partridge Rubber Co.'s factory and one for $100,000 for the new factory of the Northern Rubber Co.

Haileybury.—Tenders will shortly be called for erection of foundry and machine shop for the United Iron & Machinery Co. Estimated cost, $100,000.

Hamilton.—Plans have been prepared for a modern factory building for the National Paper Goods Co., Ltd.—The Nukol Fuel Co. contemplate the erection of a $40,000 factory.—The Industrial Varnish Co. will erect a factory here at a cost of $100,000.

The Quaker City Chemical Co., with headquarters at Philadelphia, will erect a branch factory in this city. The first building to be erected will be 100 ft. x 60 ft., and three storeys high. C. Herbert McKay and John P. McKay have charge of building operations.

Kitchener.—Mr. C. Rieder, who recently became president of the Ames-Holden-McCready Co., wholesale shoe manufacturers, has been in Kitchener recently, and made the announce-



"Balloon" Fly Traps
Many Varieties of Vermin Exterminators

E. T. Wright Co., Limited

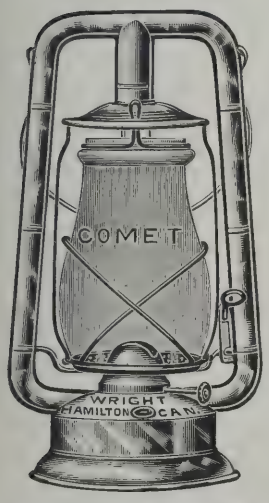
Hamilton - Canada

EXPORT MANUFACTURERS OF



Bird Cages
Brass and Japanned. For Canaries, Parrots, Squirrels, Mice and Small Pets

Lanterns, Bird Cages, Oilers, Stamped, Pieced and Japanned Tinwares
Victor Sifters, Lunch Boxes, Fly Traps, Asbestos Mats, etc.



We make everything we export, and export only what we make.
Most of our export lines nest snugly, and ship in compact space.

Goods quoted F.A.S. Seaboard. Packages free.

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Agencies in
England, Scotland, Australia, New Zealand, British West Indies, China, South Africa, France

Write for our complete export price list with classified cable code



"Canuck" Bread Mixers
Labor-Saving Kitchen Devices of All Kinds

Canada's Largest Cap Makers

Showing the Largest and most varied range of

Cloth and Tweed HATS and CAPS

for

MEN

WOMEN

and

CHILDREN



Eastern Hats and Caps

are sold in

5,000 STORES

from Coast to Coast

Factory and Head Office

TRURO, N.S.

Eastern Hat & Cap Mfg. Co., Limited

Sample Rooms at Montreal, Toronto, Winnipeg, Vancouver, Regina, Sask., St. John, N.B.

ARNETTIZE YOUR STORE

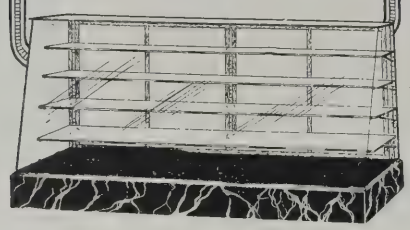
Goods Well Displayed Are Half Sold

Where's your stock kept—in drawers under the counter or directly under the eyes of the buying public in an

ARNETT SHOW CASE

—The "Show case with a purpose." Let us send you our catalogue and tell you something of our service—Let us Arnettize your store.

THOMAS LEWIS ARNETT
SOURIS, MANITOBA



STERLING SILVER

TEAWARE TOILETWARE
FLATWARE SOUVENIRS
NOVELTIES TROPHY CUPS
MEDALISTS

E.P.N.S.

TEAWARE
HOLLOW-WARE

RICH CUT GLASS

Roden Bros.

LIMITED
MANUFACTURERS

345 Carlaw Ave. Toronto, Canada

ment that the property of the late Ward Bowlby, consisting of about five acres of land on King Street West, has been purchased for manufacturing purposes. Mr. Rieder declined to divulge the nature of the industry to be erected, but it is generally understood that it is proposed to erect a large and up-to-date plant for manufacture of tires and other rubber goods. Mr. Rieder intimated that building operations would commence within a few weeks, and that the new factory would be one of the largest of its kind in Kitchener. He declared that he looked upon Kitchener as the rubber centre of Canada, and this was why it was decided to locate the new plant here.

Leamington.—Contract has been let for a manufacturing plant and power house, costing $125,000, for the Imperial Tobacco Co.

Listowel.—Canadian Flax Mills, with offices at 96 King Street East, Toronto, plan erection of a flax mill here.

London.—The Republic Motor Truck Co. are having plans prepared for a $500,000 plant at London.—Tenders were received last month for the erection of a $250,000 factory for the Hole-proof Hosiery Co. of Canada, Ltd.—An addition is to be made to the factory of the Murray Shoe Co., Ltd., Richmond Street.

Mount Forest.—An addition, costing about $10,000, will be made to the foundry of Ernest Bros.

Oak Ridges.—Site has been secured on Pharmacy Avenue for the erection of a factory by the Gendron Manufacturing Co., and work of excavation will commence soon. The firm will instal its own water mains from the lake to the building, and pumping plant, and asphalt sidewalks.

Oshawa.—Only eight votes were cast against the by-law to grant the Ontario Steel Products Co., of Gananoque, a fixed assessment of $20,000 for ten years, on the factory buildings they propose to erect on the Rider property and premises, which they have purchased on the Ritson Road, north of the C.N.R., while 604 property owners voted for it, or nearly 99 per cent.

The General Motors of Canada, Ltd., have announced part of their extension policy. A new four-storey plant, 400 feet x 80 feet, will be erected to assemble Oldsmobiles and trucks. A central shipping building, 200 feet x 80 feet, with a capacity of fifty-six freight cars under roof, will be erected, so that inclement weather will not handicap shipping operations. An enamelling plant, 300 feet x 80 feet, three storeys, equipped with the most modern facilities for efficiency and mammoth production, will also be erected. In addition to the above, extensive alterations and improvements will be made on the present plant.

Ottawa.—A new $75,000 factory is to be erected by the Beach Co., Spencer Street.

Owen Sound.—The Dominion Oil Co. will establish a modern plant in this city.

St. Catharines.—Contract has been let by the Imperial Oil Co. for a plant costing about $20,000.

Sault Ste. Marie.—Work will begin at once on extension of the Algoma Steel Corporation's rail mill.

Tillsonburg.—An addition is being made to the factory of the Tillsonburg Shoe Co., Ltd.

Toronto.—An addition is to be made to the factory of the Cowan Co., Ltd.—The Wm. Wrigley, Jr., Co. also contemplate making an addition to their factory on Carlaw Avenue.—A $60,000 plant is spoken of for the Dodge Bros., manufacturers of automobiles.—Contracts have been let for an addition to the factory of Wm. Neilson, Ltd., 277 Gladstone Avenue.—The Canadian Ice Machine Co., Ltd., 82 Chestnut Street, have let contracts for a $40,000 plant.—An addition is to be made to the factory of the Goodyear Tire & Rubber Co. at New Toronto.—A $65,000 factory building is being erected for Gelber Bros., 217 Richmond Street West.—W. J. Keen, 259 Spadina Avenue, is calling for tenders for the erection of a factory.

Leo. Brilliant has formed the Brilliant Necktie Co., and is now manufacturing at 80 Harbord Street, having installed a number of the latest Brinton machines for the production of knitted ties and scarfs.

The Holden-Morgan munition plant on Coxwell Avenue has been sold to the John Wood Mfg. Co. of Conshohocken, Pa., which will employ three hundred men in the manufacture of range boilers. The initial output will be 200 boilers a day.

Alterations and additions are to be made to the plant of the Blatchford Calf Meal Co., of Pelham Avenue.

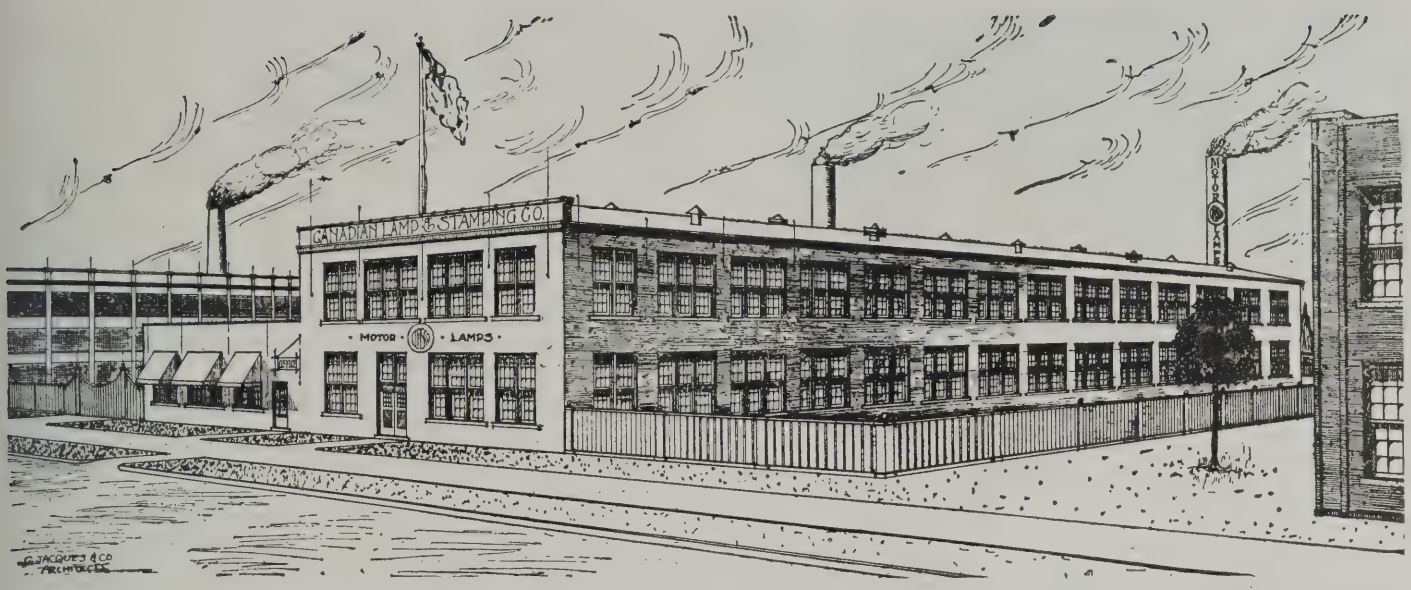
An addition is to be made to the factory of the Brunswick-Balke-Collender Co. of Canada, Ltd.

The Russell Motor Car Co. has sold its Buffalo plant, which was an important subsidiary during its operations on war contracts. It is said that the sale is an advantageous one, realizing more than the company put into it.

Statement has been issued at Toronto City Hall that the Nukol Co. had taken a lease of the property formerly occupied by Toronto Shipbuilding Co. The lease, which was issued by the Harbor Commissioners, is for twenty-one years. It occupies some two and a half to three acres. The company is importing machinery from Belgium, and will start operations in making Nukol as soon as it is installed.

C. A. P. Turner, C.E., a reinforced concrete specialist from the United States, is in Toronto in reference to the designing of the new building for the Northern Aluminum Co. The building is to be 280 x 60 feet, and will be 90 feet high. There will be eight storeys, which will make it actually a ten-storey building, and it will be of reinforced concrete.

Vankleek Hill.—The Perfection Manufacturing Co. contemplates extension to plant.



STAMPINGS

Our specialty is the producing of difficult stampings and deep drawing work in Brass, Steel, Copper, etc., and our plant is adequately equipped to handle this class of work.

Our continually growing list of particular customers, is your best guarantee of ***co-operation, service,*** and ***genuine satisfaction.***

Nothing too small; nothing too difficult for our consideration.

Canadian Lamp and Stamping Co., Limited

Ford City, Ontario

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Side Leathers and Splits

IN CANADA

SOME OF OUR LINES :

For Bag, Case and Trunk Mfrs.

Bag—Smooth or Embossed, Case, Trunk, Strap, Brace· Trunk Strap in any weight or colour.

For Bookbinders and Specialty Mfrs.

Buffings, Long Grains, Cross Grains, Resplits, Pocket Book and Purse in Morocco, Seal, Hog, etc., Razor Strap, Belts.

For Harness and Saddlery Mfrs.

Harness and Collar Leather in Black and Russet, Bridle, Mexican Saddle, Schapp, Cuff Folded Hand-parts, Beaded Line.

For Boot and Shoe Mfrs.

Upper—Vegetable and Semi-Chrome Tannage, Grain Insole, Oil Tan Shoepack.

FOR PUMP VALVES, HYDRAULIC DISC, ETC., OUR

SPECIAL VALVE LEATHER STANDS ALONE

Wax Splits, Collar Splits, Flex Splits, Bag Splits, Strap Splits, Insole, Slipper Sole, Soft Sole and Socklining Splits. Splits for all purposes.

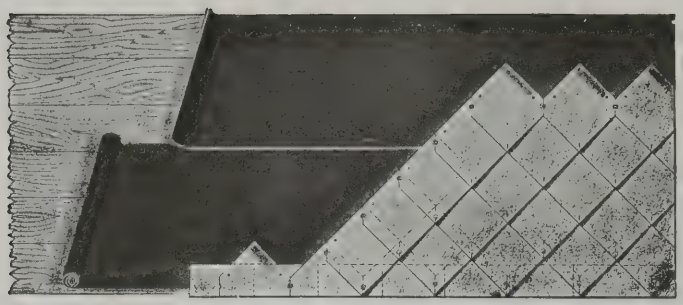
The Barrie Tanning Company, Limited

HEAD OFFICE AND TANNERY: BARRIE, ONT.

Warehouse and Salesroom: 51 Front St. East, Toronto, Ont.

Representative to Shoe trade for Quebec Province: R. M. Fraser, 1 St. Helen St., Montreal

Cable Address: Bartanco. Codes, A.B.C. 5th edition, Widebrook & Lieber

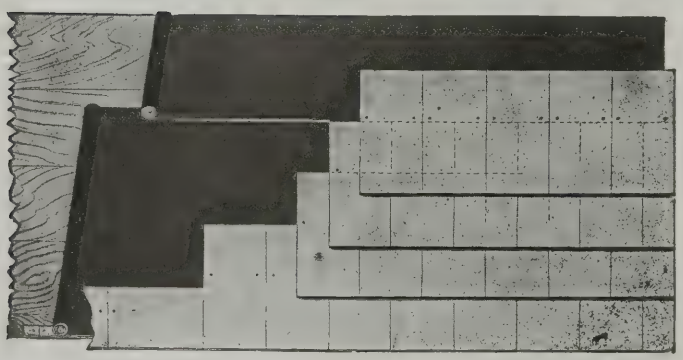


DIAGONAL METHOD

The
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Concrete Roof
MADE IN CANADA
of Canadian
Portland Cement Reinforced
with Asbestos Fibre
MINED IN CANADA

"ASBESTOSLATE"

The most economical
for any building with sloped roof
Also for siding
NEEDS NO PAINT
FIREPROOF
PERMANENT



STRAIGHT METHOD

Buy "Asbestoslate" and avoid Re-roofing and Repairs

Catalog and samples on request

Asbestos Manufacturing Co., Ltd.

Sales Offices: DRUMMOND BLDG., MONTREAL
Factory: LACHINE, P.Q.

Makers of Asbestoslates, Lumber, Linabestos Wall Board, Pipe Coverings, Mill Board, etc.

Walkerton.—To meet the continued growth of the Canadian textile industry and their continually expanding trade among that industry, the Canada Spool & Bobbin Co., Ltd., are making additions to their plant and building to the extent of $13,000, the company asking the town to guarantee the bonds to the extent of $10,000. While not under the present name, the company has been in continuous business for over seventy years. They have operated under the present name since 1906. During the past year they have had an output of over two million bobbins, and with the new and up-to-date automatic machinery they are installing they will increase that capacity to nearly three million.

Walkerville.—Work on the big plant of the General Motors Corporation is being rushed.—Ten model workingmen's homes, out of a programme of seventy-five, are under construction for the Walkerville Land & Building Co.—A five-story addition will be erected at the plant of the American Auto Trimming Co.—Acme Roofing Co., Walker Road, will erect a new factory.

Weston.—The K. & S. Canadian Tire & Rubber Co. will erect an addition to their factory here.

Wallaceburg.—Work will start shortly for a $10,000 planing mill for the Wallaceburg Lumber Co.

Welland.—The Welland plant of the Canadian Steel Foundries has closed down and the machinery has been shipped to Montreal.

Windsor.—In an effort to increase the factory space, Hiram Walker Sons, Ltd., have commenced construction of a new one-storey addition to their present power building on Devonshire Road, between the G.T.R. and P.M.R. tracks. The new story will be the full size of the other floors, and will accommodate one, or possibly two, more manufacturing concerns. Cost, about $18,000.

Contract for the erection of a one-storey factory has been let by the Champion Spark Plug Co. of Canada, Ltd.

QUEBEC.

Beauharnois.—The Howard Smith Paper Mills will make an addition to their paper mill here.

Granby.—Contracts have been let for a $35,000 factory for the Miner Rubber Co.

Kipawa.—The Kipawa Fibre Co. have let the contract for thirty-six residences, each costing $5,000.

Laval.—The metal stamping works of the Laval Industrial Co. were recently destroyed by fire with a loss of $18,000.

Montreal.—The American Druggists' Syndicate, 24 Craig Street W., contemplate the erection of a factory.—The Wayland Shoe Co. will make an addition to their plant on Providence Street.

The firm of John W. Gates, Ltd., of Montreal, has recently been reorganized under the name of the Gates, Refractories, Ltd., for the purpose of manufacturing all kinds and shapes of high-grade refractory bricks for furnace purposes. The company is now capitalized at $250,000; a plant has been acquired in Montreal East for $25,000, and the erection of kilns and the installation of equipment has already commenced. Operations will be started within the course of a few weeks.

The Mount Royal Rubber Co. will establish a plant in the east end of the city.

Quebec.—The Marceau Oilcloth Co. plans erection of a factory here.—An addition is being made to the factory of Lachance & Tanguay.

St. Hyacinthe.—Cassavant Phonograph Co. plan alterations and addition to their factory.

Shawinigan Falls.—Jos. W. Boisvert has purchased site and will erect a small factory.

Sherbrooke.—Julius Kayser, of the glove manufacturing firm, has announced that a new factory will be erected by the firm on Frontenac Street.

Three Rivers.—Contract has been let to a Montreal firm for the erection of a $150,000 plant for the Page Wire Fence Co.

SASKATCHEWAN.

Regina.—The Ontario Wind Engine & Pump Co. is erecting a new office and warehous building at the corner of St. John Street and Eighth Avenue, Regina, Sask., increased space being made necessary by the larger volume of business which the firm is handling. The structure is of red brick, one storey, 60 x 120 ft. Regina is the headquarters of the firm for Western Canada, branch offices being located in Winnipeg and Calgary.

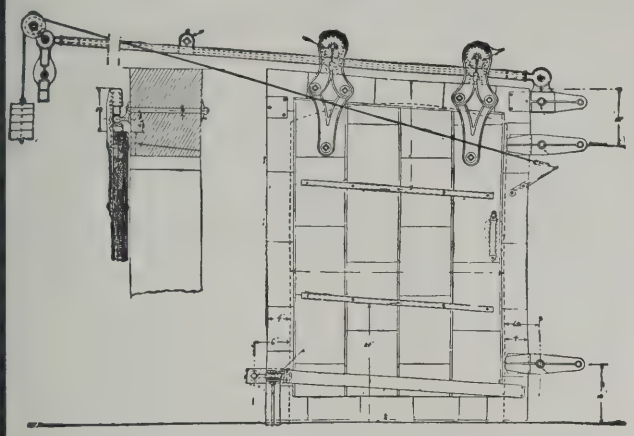
A War Souvenir

A wall card, measuring 10 x 14 inches, and featuring the portraits of Marshals Foch and Haig, General Pershing and Admiral Beatty, has been issued by the International Business Machines Co., Limited, and sister companies. The colors of the Allies, together with a warship and tank, are interwoven in the design, which carries the inscription, "Backed by the Allied forces, these men won the war."

SLATER & BARNARD LTD.

Allith Manufacturing Co., Limited, Branch

HAMILTON, CANADA



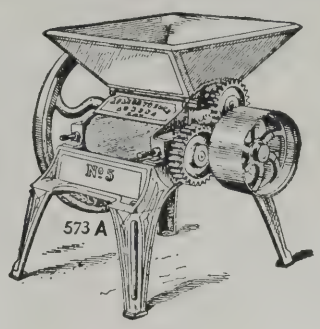
STYLE 700

ALL MADE IN CANADA

Allith Fire Door Hardware is inspected and labelled by Underwriters' Laboratories (Inc.) SAVE MONEY and SECURE MAXIMUM PROTECTION by SPECIFYING ALLITH LABELLED FIXTURES for your Fire Doors.

Write us for prices on Parallel Door Equipment for your heavy Warehouse Doors

WE MAKE ALL STYLES OF DOOR EQUIPMENT



YOUR HORSES THRIVE if you feed Crushed Oats YOU SAVE GRAIN

FLEURY

ROLLER GRAIN CRUSHERS

Two-rollers and Three-rollers used with 2 to 25 Horse Power. Simple in construction, strong and very durable.

Made to CRUSH or if preferred, fitted for ROLLING or FLAKING only.

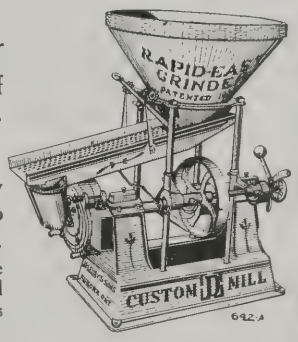
For Fine Grinding

"Rapid-Easy" Plate Grinder

excel in quantity and quality of work and economy of power.

A Size for any Power

Even if you feed only a few head of stock, it will pay you to have a Crusher or a Grinder. Tell us what Power you have and the class of work you prefer. We shall be pleased to advise which Machine is best suited to your purpose.



J. FLEURY'S SONS

AURORA ONTARIO

LUMBER

Rough Lumber in Spruce, Pine, Hemlock and Hardwood. Doors, Windows, Sheathing and House Finish. Hardwood Mouldings and Flooring. Excelsior Box Shooks, Turnings, etc.

QUALITY AND SERVICE

Scotia Woodworkers, Ltd.

HALIFAX, N.S. **OXFORD, N.S.**

Drill Steel Opportunity

25 Tons 1-⅛" Cruciform Section Solid Drill Steel

25 Tons 1-¼" Cruciform Section Solid Drill Steel

Will receive bids on lot or any portion above steel for immediate delivery.

Guaranteed quality.

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OF CANADA LIMITED

Head Office:
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MONTREAL

Works:
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THE PUBLISHING HOUSE of MYSTERY

Thos. S. Young, General Manager

Hugh C. MacLean, Limited
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Footwear Canada Lumberman
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The Hugh C. MacLean Co., Ltd
Publishers
Coal Review Western Canada Contractor
The Commercial Western Lumberman

Toronto, Montreal, Winnipeg,
Vancouver, Chicago, New York,
London, (Eng.)

Recent Trade Enquiries

A List of Enquiries Received Through the Canadian Trade Mission, London, England

1. A firm in Australia desires to receive details and quotations from manufacturers of Canadian hardware, particularly enamelware, and glassware.
2. A firm in South Africa desires to correspond with producers of hardware interested in establishing trade connection with South Africa.
3. A firm in Australia will welcome quotations from producers of cutlery, hardware, garden tools, poultry supplies, etc.
4. A firm in South Africa desires to correspond with Canadian manufacturers of hardware, cart builders' and wagon builders' material, leather, finished timbers, etc.
5. A firm in France asks for samples and quotations on condensed milk.
6. A firm in New Zealand desires quotations on the best qualities of formaldehyde 40 per cent. and cotton seed oil.
7. A firm in Australia desires quotations on paint and painters' supplies.
8. A firm in France asks for quotations and particulars on isinglass, manganese and molybdenite.
9. A firm in South Africa desires to correspond with Canadian manufacturers of leather.
10. A firm in Cyprus desires to establish business relations with first manufacturers of textiles, cartridges, shot, gunpowder, etc.
11. A firm in Natal desires to establish relations with Canadian producers of all products suitable for importation into South Africa.
12. A firm in Italy desires to represent Canadian firms for commodities suitable for import to that province.
13. A firm in England desires to establish business relations with Canadian exporters of canned fruits and general produce.
14. A firm in Australia is interested in receiving quotations and particulars from producers of soft goods, cotton piece, woolens, silks, etc.
15. A firm in South Africa desires to correspond with producers of textile goods interested in working up a trade connection with South Africa.
16. A firm in Denmark desires to represent Canadian manufacturers of fireproof materials, all kinds of machinery, apparatus for gas and waterworks, tubes, coal, etc.
17. A firm in France desires to establish business relations with Canadian producers of alimentary pastes, lard, hams, meat and paper for printing or packing and also pulpwood.
18. A firm in India which imports American and Canadian produce regularly, desires to extend their connections to reliable houses who are keen on export of Canadian goods.
19. A firm in Norway desires to establish business relations with first-class Canadian mills and exporters of wheat and rye flour, rolled oats, iron and steel.
20. A firm in Greece wishes to purchase large and regular quantities of flour and desires good sized samples of higher grades, with quotations.
21. A firm in Norway is prepared to take up new connections in flour, grain and other food articles as well as coal, iron and steel.
22. A firm in Norway desires to correspond with Canadian manufacturers of drugs, chemicals, oils, provisions, hosiery, cotton goods and wool.
23. A firm in Norway desires to secure a general representative with exclusive territorial rights for Norway for leading Canadian manufacturers, merchants and exporters.
24. A firm in Denmark desires to correspond with reliable exporters of all raw materials for industrial purposes, as well as manufactured goods suitable for import to Denmark.
25. A firm in France desires to establish relations with all Canadian concerns interested in that district.
26. A firm in Saaz desires to represent manufacturers of Quaker oats, tinned meat and fish, cheese and other foodstuffs.
27. A firm in England desires to establish relations with exporters of cereals, canned fruits, canned fish and other articles pertaining to the produce market.
28. A number of firms in Mexico City are interested in the importation of builder's hardware.
29. A number of firms in Mexico are interested in the purchase of canned goods.
30. A firm in England desires to represent Canadian manufacturers of cotton prints, hosiery, etc.
31. A firm in South Africa desires to correspond with Canadian manufacturers of finished timbers.
32. A firm in Denmark wishes to be placed in touch with shippers of such foodstuffs as butter, flour, canned goods (lobster, salmon, etc.).

DOMINION GLASS COMPANY LIMITED

HIGHEST QUALITY TANK GLASS PRODUCTIONS

FLINT
DARK GREEN
AMBER

Bottles, Jars, Packers' Ware
Tumblers, Chimneys, Globes

Our Productive Ability can be Gauged by the Numerous Colors at the Disposal of Patrons

OWENS MACHINE WARE WITH
PATENT CLOSURES A SPECIALTY

BLUE
LIGHT GREEN
OPAL

HEAD OFFICE—MONTREAL EXPORT OFFICE—MONTREAL

SALES OFFICES—WINNIPEG, VANCOUVER

FACTORIES

MONTREAL TORONTO HAMILTON WALLACEBURG REDCLIFF

WHITTALL CANS

for

Meats Vegetables Milk Syrup Fish
Paint Etc.

PACKERS' CANS

Open Top Sanitary Cans
and
Standard Packer Cans
with Solder-Hemmed Caps

A. R. Whittall Can Company, Ltd.
MONTREAL
Established 1888

Write for Prices

on

SINGLE PHASE MOTORS

REPULSION and SPLITPHASE Types

Toronto and Hamilton Electric Co. Limited

99 - 103 McNab St. N.

Hamilton, Ont.



Maples Limited

Manufacturers and Refiners

TORONTO *CANADA*

33. A firm in Denmark desires to communicate with manufacturers of agricultural implements.

34. A firm in Denmark desires to be put in connection with some Canadian firms that wish to export manufactured and raw materials. Samples, catalogues and quotations requested.

35. A firm in Denmark wishes a list of firms who are interested in export of foodstuffs.

36. A firm in France is particularly interested in wheat flour, beans, vegetables, and alimentary products and asks for samples and quotations.

37. A firm in Abyssinia is interested in fruits in syrup and would like to receive price-lists and samples.

38. A firm in Costa Rica desires to establish business relations with Canadian manufacturers of cloth, including both cotton and wool, and ironware.

39. Canadian producers interested in establishing trade with Denmark may find it to their advantage to correspond with a firm in Denmark, which is devoting considerable time and attention to encouraging trade between this country and Canada. Goods mentioned are: Foodstuffs, all kinds of textile goods, and machinery of all descriptions.

40. A firm in Belgium desires to establish business relations with leading manufacturers of grease proof paper and producers or exporters of raw asbestos.

41. A firm in England desires to correspond with Canadian exporters of barytes.

42. A firm in Switzerland will be very glad to be put in touch with Canadian exporters of foodstuffs with a view of obtaining part of the supplies for Switzerland during the coming crop year.

The Nitrate of Soda Supply

Useful Information from Chile Regarding the Supply of this Important Commodity

Manufacturers engaged in the glassware, fertilizer and explosive industries will probably be interested in the following information regarding the nitrate of soda business in Chile, which is supplied through the courtesy of Mr. H. Feilman, Toronto. The information comes to Mr. Feilman from his brother, Mr. Erwin Feilman, who resides in Chile. The latter writes:

"A few months ago 'La Asociacion de Productores de Salitre de Chile' (The Nitrate Producers Association of Chili), with headquarters in Valparaiso, was formed, and at present about 80 per cent. of all the nitrate companies are represented in this association, which is the only one that can sell nitrate of soda in our days.

"The prices fixed for the moment are for every 46 kos. Spanish quintal—22 Spanish quintals equal to 1 ton), 10s. 1d. for nitrate of 95 per cent. and 10s. 6d. for refined nitrate, say 96 per cent. These prices are free along side steamer, quoted in British currency and payable at completion of loading here in Chili in first-class bills of exchange on London or New York at seller's satisfaction.

"The nitrate of soda of 95 per cent. is generally used as manure for fertilizing purposes, and the 96 per cent. one was purchased in very large quantities during the past war by munition factories.

"Nitrate is shipped in bags of about 100 kilos—say 2 quintals Spanish net—and the price includes the bag, but the weight is taken on the nitrate only deducting from the gross weight 0.7 per cent. for the bag. Generally 10½ bags are counted to the ton.

"*Re* freight from here to New York or Halifax or any other port in the U.S.A. or in Canada, I am sorry to say, that I have not been able to obtain any quotation and I have come to the conclusion that the steamship lines will not carry any nitrate from here until the prohibition of the import on nitrate of soda into the U.S.A. has been removed.

"Due to the actual international situation, it is very difficult for me to give to you all the details I should like to forward, but as it will take some time yet until there will be sufficient shipping facilities, I should advise you to communicate at once with the above-named association and when writing you may drop at the same time some lines to Mr. Carlos Cavallero, partner of the firm of Bruna, Sampaio & Co., of Valparaiso, who has offered himself to see that you may receive prompt attention."

DEPENDABLE SERVICE

JOINT GLUE



VENEER GLUE

ALWAYS UNIFORM
Samples and Prices on Request

DELANY & PETTIT, LIMITED
TORONTO

Dominating the Stove and Furnace Industry

Strong, virile energy concentrated on making every product a success, in quality and workmanship;

Live, stimulating advertising to educate and hold the consumer;

Breadth of vision and confidence in your country to push plant extensions to meet estimated big business;

Culminating in the present-day largest organization of Stove and Furnace Manufacturers in the British Empire;

AT YOUR SERVICE, seventy-two years ago and NOW

McClary's

London, Toronto, Montreal, Winnipeg, Vancouver, St. John, N.B.
Hamilton, Calgary, Saskatoon, Edmonton

The
Canadian Meter Co., Ltd.

Manufacturers of
METERS
For Acetylene, Coal, Gasoline and Natural Gases, also for Air

Office and Works:
HAMILTON, CANADA
90 CAROLINE ST. N.

WE GIVE
"Quality and Service"
in
Tractor and Truck
Steel Castings

JOLIETTE STEEL CO. LIMITED
903 Read Building
MONTREAL

Merchant's Bank Makes Progress

On April 30th Closed the Best Year in the Long History of the Institution

The annual report of the Merchants Bank of Canada for the year ended April 30th, 1919, is the most satisfactory in the history of this bank. Not only were net earnings greater than in the previous year, but deposits, both interest bearing and non-interest bearing, current loans, quickly available assets, and total assets, all show very satisfactory increases. Net earnings increased from $1,236,000 to $1,383,569. Total deposits in Canada now stand at over $138,000,000, as compared with $113,000,000 for the previous year. Quickly available assets stand at $62,750,000, a gain of over $5,000,000 as compared with the previous year. Current loans in Canada amount to $95,874,000, a gain of almost $20,000,000 over the figures for the previous year, and furnish a striking illustration of the large part the Merchants Bank is playing in the business needs of the country. Total assets of $186,725,000 compare with $141,000,000 last year.

Other evidences of progress were shown by the fact that since the close of war the Merchants Bank has opened many new branches and sub-branches. It is thus doing everything possible to provide adequate banking facilities to the country, and at the same time absorb its officers now returning from overseas. Sir H. Montagu Allan, the president of the bank, in his address reviewed the balance sheet, and spoke of the death of Andrew A. Allan, one of the directors. General Manager D. C. Macarow referred to the satisfactory business which had been transacted during the year, and the promising outlook for the coming year. Altogether it was a report which reflects the highest credit upon the management of the bank.

A further evidence of the shareholders confidence in their directors was shown by their authorization of an increase in the bank's capital from $10,000,000 to $15,000,000. This increase is to provide for future expansion. The president explained that there was no intention of issuing any stock in the near future.

New Wingham Industry

Aero Cushion Inner Tire Co. Expects to Start Operations Some Time this Month

It is the hope of the Aero Cushion Inner Tire & Rubber Co. of Ontario, Limited, which is locating a plant in Wingham, Ont., to be able to start manufacturing about the middle of July. The company, which has been incorporated by a number of local capitalists, has taken over the two buildings of the Western Foundry Co., Limited, and is now putting them in shape for use. In one building, 200 x 80 feet, inner tires will be manufactured; in the other, 165 x 65 feet, casings and a general line of rubber goods. Additional land is available for expansion.

It is the intention of the company to begin with the manufacture of the inner tire only, and then, when the demand for them is well in hand, possibly in a year, to expand into casings and a general line of rubber goods. Initial capacity will be about 100 inner tires a day. This will require about thirty hands, not including the office staff.

The aero-cushion tire is the invention of E. L. Sherboudy, who will be general manager of the company. It is an inner tire, circular in form, moulded in size and shape to fit the outer casing, composed of pure para rubber, highly porous, which makes it very light and resilient. Blowouts and punctures are claimed to be absolutely impossible owing to the confinement of the air in millions of pores.

Every Member of Our Organization is an Active Worker, co-operating to produce Results

Results mean Satisfied Owners

JOHN V. GRAY CONSTRUCTION CO., LTD.
GENERAL CONTRACTORS
625 Confederation Life Building - - - - TORONTO, ONT.

ARE YOUR STEAM PIPES INSULATED?

IF NOT YOU ARE BURNING MONEY

A GOOD COVERING pays for itself in one Season, and is a revenue producer indefinitely. The Best is the Cheapest **WE HAVE IT**

EUREKA MINERAL WOOL & ASBESTOS COMPANY
118 ADELAIDE STREET WEST, TORONTO, ONTARIO

JULIUS COHEN & JOSEPHY

Foreign Domestic **WOOL** *Noils, Wastes and Shoddy*

Also operating THE YORKSHIRE WOOL STOCK MILLS, ALMONTE, ONT.

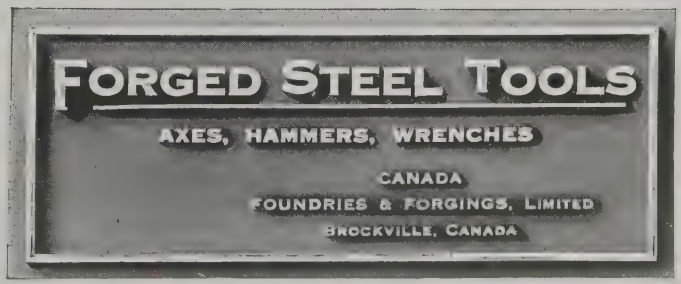
Manufacturers of Pulled and Carded Shoddies

H. V. ANDREWS Canadian Representative **13 Church St., Toronto**



GEARS
Spur
Worm
Spiral
or Gear Cutting from your blanks.

Hamilton Motor Works, Limited
HAMILTON, CANADA



A Man of Widespread Interests

New Chairman of the Maritime Branch, C.M.A., Connected with Numerous Companies

Angus McLean, recently elected chairman of the Maritime Branch, C.M.A., forms the subject of an interesting sketch in a recent number of the *Canadian Lumberman.* Mr. McLean, it appears, was born in Thurso, Que., and early in life took to the woods and the open air. When fourteen years old, he made his first trip to Montreal with his father on a raft. This was in the spring of 1874, and since that date Mr. McLean has been engaged continuously in the timber and lumber business. His father, Donald McLean, was a well known lumber man and was in the square timber trade for many years, getting out square and platted pine and cedar in the winter and floating the rafts down the Ottawa River to Lachine and Montreal in the spring and summer. Angus McLean secured his first job with James McLean & Co., of Buckingham, Que., in 1877, as a shipper of lumber, and soon after entered the office of J. A. Cameron & Co., North Nation Mills, Que., with whom he remained a number of years. He then took a position with W. C. Edwards & Co., at their Rockland plant on the Ontario side of the Ottawa River, which mill has been established fifty-one years. There, in the capacity of accountant, Mr. McLean remained until 1895, when he went to Buffalo, N.Y., and in association with his brother, Hugh McLean, was engaged in business under the firm name of Hugh McLean & Co. He returned to Canada ten years ago to become General Manager of the Bathurst Lumber Co., Limited, Bathurst, N.B. Mr. McLean holds a number of important offices, being President of the Hugh McLean Co., of Buffalo, Vice-President of the Haines Lumber Co., of North Tonawanda, N.Y., and Vice-President of the Wood Mosaic Co. of New Albany, Indiana, as well as Vice-Chairman of the Eastern Spruce Manufacturers Section of the Canadian Lumbermen's Association.

He has two sons—A. E. McLean, who has spent several years in the business, and is now manager of the pulp and paper division, and Hugh McLean, who spent some years overseas during the war with the 12th Canadian Siege Battery. Gunner McLean enlisted in September, 1917, and sailed for England in December of the same year. In March, 1918, he landed in France and was in the fray until the armistice was signed. He went through the severe fighting at Cambrai, where the Canadians suffered such heavy loss, and had just reached Mons when the war terminated. Gunner McLean returned home recently and was given a cordial welcome.

Former Officer in Practice

Mr. N. A. Keys has Entered upon the Practise of the Law in Toronto

Many of the members of the Association will recall Mr. N. A. Keys, who was the assistant to the Legal Secretary of the C. M. A. in the happy days before the war. He has just recently associated himself in the practise of law with Mr. C. F. Ritchie in the Continental Life Building, Bay and Richmond Streets, Toronto. Mr. Keys would be the last man to describe himself as a "first-class fighting man," but during his thirty-three months' connection with the Canadian Expeditionary Force he accumulated, among other things, a fund of experience, a commission, a Military Cross and three wound stripes. On his return to Canada he spent about a year in Ottawa administering the War Charities Act in the Secretary of State's Department. His renewed venture into the legal field started in the middle of June. All his former associates proffer to him their best wishes for his success.

Canadian Carbonate Company, Limited

Offices and Factories:

HALIFAX, MONTREAL, TORONTO

WINNIPEG, VANCOUVER

■

Manufacturers of

"CROWN BRAND" LIQUID CARBONIC ACID GAS

Protect Your Employees and You Protect Your Plant



The Minute your Employees find that YOU are looking after THEIR welfare, they'll begin to do better work for you.

Cheerful surroundings and safeguards to health are to-day considered the best aids to efficiency.

EDDY'S TISSUE TOWELS

Do away with germ carrying or disease spreading through the medium of the Roller Towel.

Each person has a clean towel. Each towel is used only once—then thrown away.

Made of soft crepe paper, clothlike in feel and results, put up in rolls of 150, 250 and 500, each roll is well perforated and each towel easy to detach.

No laundry bills when you use Tissue Towels. They're always dry, always clean, always fresh and ready to use. Whether your staff is fifty or five thousand, you'll find Eddy's Tissue Towels effective and satisfactory.

EDDY'S FIRE PAILS

Give an added feeling of security. Made of Indurated Fibreware they can't leak, shrink or fall apart. Acids won't hurt them. Their shape prevents them being used for any other purpose than fire protection. Made by Eddy at Hull. Used all over Canada.

EDDY'S MATCHES

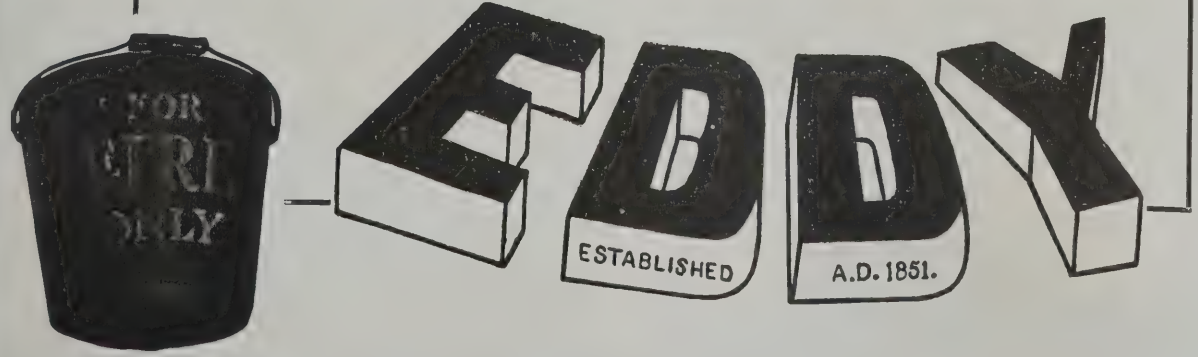
Though made to light they're as safe to carry as your pencil. Clear selected wood only is used in making them. They won't break when you strike them. Heads won't fly off, and when you blow them out they ARE out. The chemical treatment they are put through leaves no afterglow. They won't explode when trod upon.

Made at the Mammoth Plant

OF

The E. B. Eddy Co., Limited

Hull - Canada





Chemical Plant, Sandwich, Ont.

CHLORIDE OF LIME
BLEACHING POWDER
CAUSTIC SODA

The Canadian Salt Company has established the only plant in Canada manufacturing these products. The plant is equipped with the most modern machinery and your orders will receive prompt and careful attention.

ORDER WINDSOR BRAND

CHLORIDE OF LIME, BLEACHING POWDER
CAUSTIC SODA

WINDSOR TABLE SALT
REGAL TABLE SALT
Free Running
WINDSOR DAIRY SALT
WINDSOR CHEESE SALT

Windsor and Regal Salts are produced in the finest salt manufacturing plant under the British flag. Skill in manufacture, combined with scientific knowledge, has produced salt recognized for its quality in practically every home, farm and dairy in Canada.

Made in Canada by

The Canadian Salt Co., Limited

WINDSOR, ONTARIO



The Salt Plant, Windsor, Ont.

Union Bank Expands

Remarkable Growth Recorded by this Institution Since First of the Year

In the recent announcement of Mr. J. S. Hiam, Superintendent of branches, that the Union Bank of Canada's system, by a remarkable expansion which has been in progress since the commencement of the year, had been brought up to a total of 360 branches is seen the determination of the directors of this "pioneer bank of western Canada" to keep their institution in the forefront of Canadian banks. The Union Bank of Canada has made notable progress both within the Dominion and abroad following the policy of building up an institution of an international character which will provide a financial highway for Canadian trade with foreign countries and give efficient banking sservice.

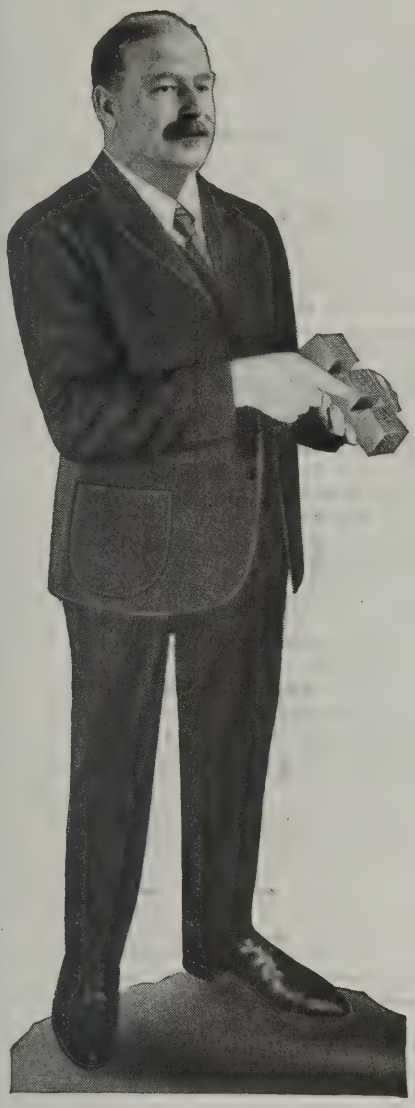
Since the signing of the armistice there has been a general disposition among bankers to extend Canadian banking facilities, but no more aggressive policy has been followed by any one institution than by the Union Bank of Canada, which in the domestic field alone has opened more than sixty new branches at strategic points from Charlottetown, P.E.I., on the Atlantic, throughout the Dominion to the Pacific coast. These latest extensions have brought the branch system of the Union Bank of Canada to a total of more than 360 branches, a notable record, and of this number some 250 branches are now located in the provinces of Manitoba, Saskatchewan, and Alberta, obviously indicating the policy of the directors to extend to the West the fullest possible measure of banking service. The Union Bank of Canada in its expansion is tapping not only immediately profitable districts, but is entering communities whose future promise alone offers the reason for establishment of a branch at this time. The directors apparently are willing to grow up with these communities.

Coupled with an impressive progress within Canada is an interesting movement abroad which is making for vital international connections, doubly important at a time when the country has particularly ambitious plans for foreign endeavors. The alliance of the Union Bank of Canada with the National Park Bank of New York which resulted in the formation of the Park-Union Foreign Banking Corporation some few months ago is resulting in the building up of notable connections abroad, and particularly in the Far East. The Corporation, apart from its executive office in New York city, has established branches at San Francisco, Seattle, Yokohama, Japan, Shanghai, China, and direct connections in the Dutch East Indies.

The Union Bank of Canada already has its own New York agency, and in London, where it has had two branches for some years, its position has been materially strengthened with the appointment of a London, Eng., Advisory Committee, the personnel of which has just been announced. The members of this Committee are, Messrs. A. E. Harris, C. W. Small, J. C. Blair, and Sir Keith Price, in association with Mr. F. W. Ashe, Assistant General Manager, resident in London.

Dunham Heating Service

Two new bulletins, Nos. 101 and 107, have been issued by the C. A. Dunham Company, Limited, Toronto, in their usual style. No. 101 deals with the Dunham Radiator Trap. This device, which renders low-pressure steam heating practical, is described and illustrated in detail, and instructions are given for its installation. No. 107 performs a corresponding service for the Dunham Air Line Valve. Both are valuable contributions to the subject of steam heating and should be in the hands of those responsible for the heating of industrial plants and other buildings.



Fellow Manufacturers

We make in Canada

Lead Pipe, Sheet Lead
Wire Solder, Bar Solder,
Ribbon Solder,
Babbitt Metal for all requirements

INGOT METALS

Copper, Tin, Lead,
Aluminum and Brass,

EVERYTHING IN METALS

Wherever you are we can serve you

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STANDARD PATTERNS



Cost less than Cast Iron Washers

Let us quote you prices

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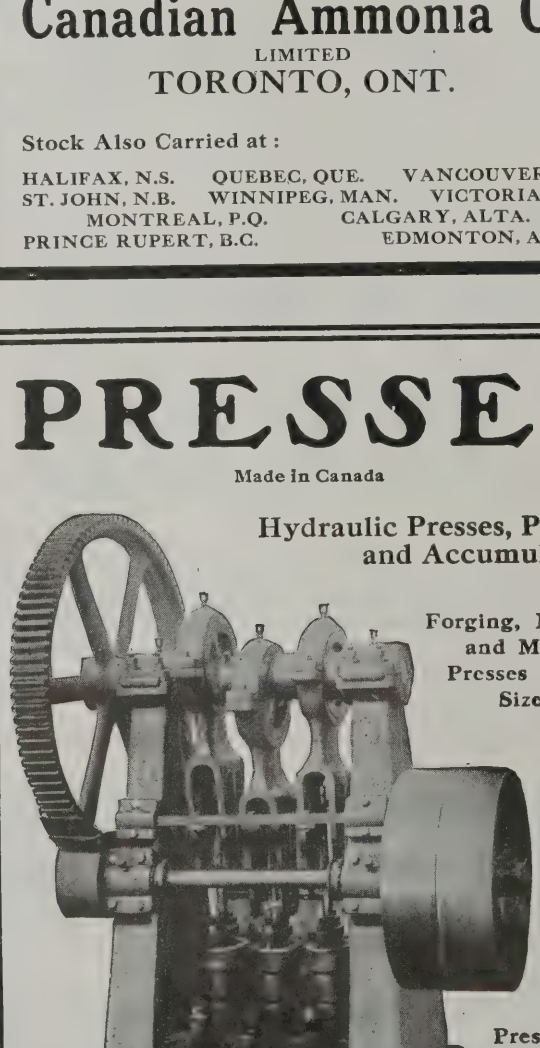
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Made in Canada

Hydraulic Presses, Pumps and Accumulators



Forging, Nosing and Marking Presses for all Size Shells

Presses for General Purposes

WILLIAM R. PERRIN, Limited
Toronto, Canada

The Canada-France Service

Canadian Manufacturers Urged to Support the New Line Now Running Between Montreal and Havre

For the first time in the history of Canadian transportation, a standard line service is now in operation between Canada and France. This service is being rendered by La Compagnie Canadienne Transatlantique Ltée, with boats operating at regular intervals between Montreal and Havre. In years past several attempts were made to do this, but they were not successful, and in consequence were abandoned. The Allan Line a few years ago had some of their boats on the London route make Havre a port of call, but this service has not been available for some time back.

La Compagnie Canadienne Transatlantique constitutes an affiliation between the Canada Steamship Lines, Limited, and La Compagnie-Generale Transatlantique, generally known as the French Line. This gives the subsidiary company the benefit of the agencies of the French Line throughout Europe and those of the Canada Steamship Lines throughout Canada and the United States, making a combination which offers every opportunity for the development of trade.

There is no doubt that Canadian exporters and importers should be greatly interested in this new line of direct service. In view of its existence it does not seem right that it should be necessary for Canadian goods to be forwarded through American seaboard ports to destination. Neither should French goods intended for Canadian importers be routed via American ports.

Under the treaty between France and Canada, signed in 1907, it is agreed that in order to get the full benefit of the tariff concessions, each party must ship through its own ports. This requirement is set forth in Article VIII, reading as follows:—

"To enjoy the benefits of the aforementioned tariff advantages, products originating in France, Algeria, the French colonies and possessions and the territories of the Protectorate of Indo-China, shall be conveyed without transhipment from a port of those territories or from a port of a territory enjoying the preferential tariff or intermediate tariff, into a sea or river port of Canada.

"To enjoy the benefits of the aforementioned tariff advantages, Canadian products shall be conveyed without transshipment from a Canadian port or from a port of a country enjoying the French minimum tariff to a port in France, Algeria, the French colonies and possessions and the territories of the Protectorate of Indo-China.

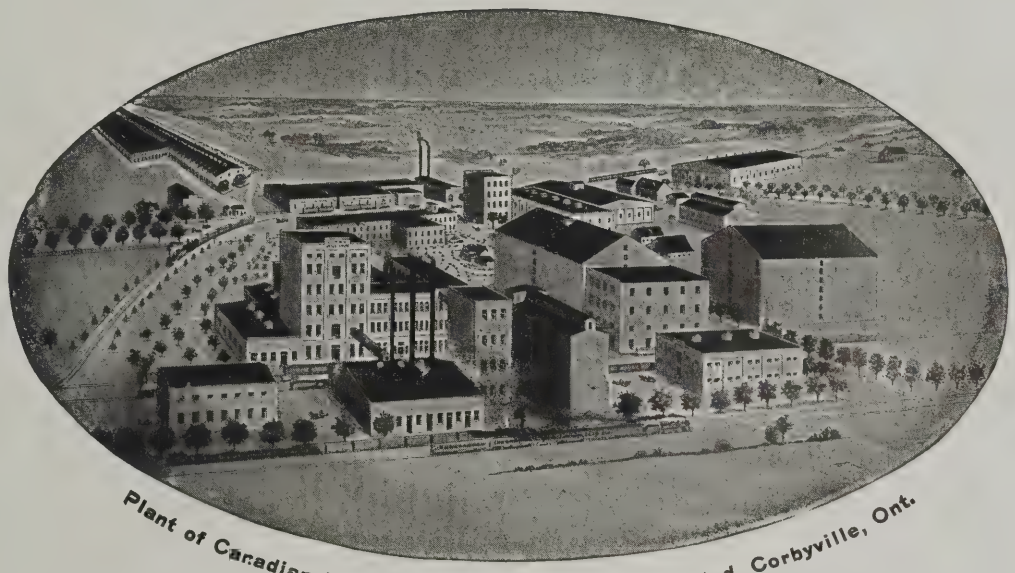
"Provided, however, that nothing in this Article shall exempt the products of either country from any surtaxe d'entrepot that is now, or hereafter may be, imposed on products imported indirectly."

The foregoing regulation has not been strictly enforced during the past two or three years because of the scarcity of ocean tonnage between Canadian and French ports, but with the new arrangements it should again be applicable.

Morris Blocks and Hoists

Two pieces of advertising literature come to hand from the Herbert Morris Crane & Hoist Co., Limited, Niagara Falls, Ont. One deals with the Morris triple-gear chain block. Its advantages, particularly where men of mature years are employed, are emphasized. Efficiency can be conserved by providing such employees with proper machinery for handling heavy loads. With a Morris triple-gear chain-block, one man can lift the heaviest piece without fear of accident. The other leaflet describes the Morris belt-driven friction hoist, a simple but effective hoist for small loads. Illustrations serve to visualize the service of this useful hoist.

ALCOHOL



Plant of Canadian Industrial Alcohol Company Limited, Corbyville, Ont.

With a capacity of 450,000 (proof) gallons per month we are the largest producers of Alcohol in Canada.

Manufacturers of vinegar, perfumes, essences, pharmaceutical preparations, etc., are invited to write us for prices of Alcohol suitable for their particular line of business.

We make a special feature of contracting for the requirements of manufacturers for the year or season, thus providing not only a uniform cost but also a steady supply as needed.

Those who are using Duty Paid Alcohol in their manufacturing processes would do well to consult us with a view to using it "In Bond," thus avoiding the use of two-year-old Alcohol. Under the rules and regulations of the Department of Inland Revenue, newly made Alcohol may be used "In Bond." This Alcohol is much cheaper than two-year-old.

METHYLATED SPIRITS or Denatured Alcohol is sold only by the Department of Inland Revenue, Ottawa, Ont., but any other kind of Alcohol may be secured from us.

CANADIAN INDUSTRIAL ALCOHOL COMPANY LIMITED

MONTREAL, QUE.

The Legal Powers of Trade Unions

By H. MACDONALD
Secretary, Legal Department, C.M.A.

IN view of the rights professed or assumed in these times, by various combinations of workmen, it may be well to state briefly how the law stands in this respect.

A trade union is an "association of laborers for their mutual benefit." A "trade union" is a broader term than "labor union," in that it embraces combinations of workmen as well as laborers. This distinction finds legislative recognition in the English Trade Union Act of 1871. Up to the passing of this Act, labor combinations were illegal and no contracts made, by or with them, were enforceable at law. At common law, workmen were prohibited from combining to force an increase of wages.

In England, various statutes were enacted since 1349, forbidding, under severe penalties, all conspiracies of workmen or laborers, "not to make or to do their work but at certain price and rate." In 1893, an eminent English Judge (Lord Mansfield) said in Rex. V, Eccles: "Every man may work at any price he pleases, but a combination not to work under certain prices is an indictable offence."

The effect of the English "Trade Union Act, 1871," was to legalize labor unions, to authorize their registration, and to enable them to hold property. The main reason why trades unions do not register is that they may be immune from the judgments of the courts. If they had a corporate status, they would be liable for their acts and their funds would be subject to attachment like any other individual.

Strikers may use peaceful persuasion and argument to induce other workmen not to accept employment with a particular employer or employers, but strikers have no right to use force. If strikers necessarily require, as a condition of success, the violation of personal liberty, they stand self-condemned.

The English restrictive legislation, however, never found much foothold in this country or in the United States. The law sanctions no combination, either of employers or employees, which have for their immediate purpose, the injury of another, or the unjustifiable interference with his rights and privileges.

All the members of the combination are liable for all the overt acts, illegally done, pursuant to the general scheme agreed on by the combination.

There has been some diversity of legal opinion upon the legality of "picketing," but by a majority of decisions, *peaceful* picketing has been held to be lawful.

In regard to the breach of agreements on the part of strikers, common in recent strikes, it is well settled that one who procures the breach of a contract of any character by one of the parties to the injury of another party, is guilty of an indictable offence.

No man can be compelled to join a union, and if he is not a member is not subject to its rules, and of course, the rules of "unions" must be legal rules. Organized labor has no business whether the employer employs free labor or union labor. Union labor may, of course, make any conditions they desire as long as they are legal, but the employer has the right to refuse acknowledgment if he wishes.

YOUR BUSINESS—
AND OURS

The return of the country to a peace basis and the opening of the markets has a direct bearing on your business and on ours.

You, a manufacturer, are faced with new problems—more efficient factory operation, new processes, material and by-product utilization, new products and new supplies.

We, an organization of practical industrial chemists, present the means of solving these problems.

A staff of technical men familiar with the practical and the commercial features of your problems—fully equipped laboratories and technical resources—will assist you in a solution of your difficulties. All information given by you is confidential.

No obligation incurred by laying before us your problems. We will write you fully regarding any inquiry.

THE LARGEST AND BEST EQUIPPED COMMERCIAL LABORATORIES IN CANADA

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INDUSTRIAL CHEMISTS, ENGINEERS AND INSPECTORS

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Agents for Baker & Adamson's Chemically Pure Acids and Chemicals

AGENTS FOR CANADIAN SALT CO.—"WINDSOR" BRAND CAUSTIC SODA & BLEACHING POWDER

Are You Thirsty?

DRINK **"GURD'S"** DRINKS

"They Satisfy"

"GURD'S" DRY GINGER ALE is select in every particular—pleasingly pungent—of delicately balanced flavor. A favorite at select social functions. To drink "GURD'S" drinks is a wholesome Canadian "national habit."

CHARLES GURD & CO., LIMITED MONTREAL

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Dominion Tar and Chemical Company

TAR DISTILLERIES:

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Also Agents and Operators for TORONTO CHEMICAL CO.

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Address all communications to Sales Office, Sault Ste. Marie, Ont.

Black Varnish	Naphthalene	Benzols	Fat Extraction Solvents
Creosote Oils	Disinfectants	Xylols	Paint Naphthas
Wood Preservative Oils	Crude Carbolic Acids	Solvent Naphthas	Crude Naphthas
Hard Coal-Tar Pitch	Phenols and Cresols	Rubber Solvents	Shingle Stain Oils

Steel Tires for Dutch Indies

Armstrong, Whitworth, of Canada, Limited, with works at Longueuil, Quebec, have just completed one of the largest individual orders for steel tires placed this year, covering 3,000 tires, placed by the Netherlands Government, New York Office, for shipment to the Dutch Indies.

These tires were manufactured from raw materials at this Company's works at Longueuil. The steel was made in Heroult electric furnaces, and the tires were manufactured with the equipment installed early in 1918, when the tire and wheel plant was added to the present works at Longueuil.

This is a concrete example of what Canadian manufacturers can do to secure foreign trade, and the success with which this order was handled by this Company has acted as an impetus to further developing foreign trade.

Needless to say, the Netherlands Government assured themselves of the very high quality of steel tires which this Company are making before placing the order in their hands, and it should be a source of gratification to Canadian manufacturers to know that markets heretofore controlled by Germany can be secured.

Canada's Trade Reviewed

A wealth of valuable information about financial, commercial and industrial conditions in Canada and Newfoundland appear in the annual report for 1918 of Mr. F. W. Field, H.M. Trade Commissioner at Toronto. It is in a sense a year book of Canadian trade and summarizes in a concise way all the important developments in finance, manufacturing and commerce during the year 1918. Mr. Field is a past master in this kind of work, and it would be difficult to find any feature of the year's happenings that is not covered very carefully by his report.

There is given, in the first place, an introductory report on the trade of the Dominion, covering financial conditions, agriculture, transportation, minerals and mining, fisheries, lumber, immigration, scientific research, industrial conditions, and import trade. Following this general report, comes a comprehensive report on the trade of the Province of Ontario, a division of the work for which Mr. Field is specially responsible. This extends to forty-eight pages and forms the backbone of the book. It is perhaps the first time that the Ontario field itself has been so thoroughly covered. The balance of the report embraces contributions from the Imperial Trade Correspondents in the other provinces of the Dominion.

The whole work is an evidence of the importance which the British Board of Trade attaches to the Canadian market.

Bankers' Opinions on Paint

A questionnaire sent to a number of bank officials brought out very clearly the fact that the person who had a well preserved and painted property had a better credit rating and standing in the community.

All the bankers were unanimous in the opinion that property kept in a good state of repair and paint entitles the owner to more consideration in a loan; that such property will sell for more money, and that it is an asset to the property owner in his financial dealings. One banker said that he found that as a man was, so was his buildings. The man who was slovenly about himself generally took no interest in the repair or condition of his buildings.



Calkin's Automatic Disinfectors

will keep your Toilets free from odors.

Our LIQUID SOAP DISPENSERS are Sanitary and will save you money. Use SHIELD BRAND LIQUID SOAP—it's pure.

SOL-O-KRE (Coal Tar) Disinfecting Fluid for scrubbing, cleaning and general disinfecting of Lavatories and Factories.

WE MAKE A SPECIALTY OF FACTORY DISINFECTING
PUT YOUR PROBLEMS UP TO OUR SERVICE MEN

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HEAVY CHEMICALS AND DYESTUFFS

The Grasselli Chemical Co.
LIMITED

Manufacturing Chemists

Toronto, Ontario

Branch Office: MONTREAL, QUE. Works: HAMILTON, ONT.

QUALITY AND SERVICE

Acetic Acid Refined
Acetic Acid Crude
Acetic Anhydride
Acetate of Soda
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Acetone Pure
Acetone Alcohol
Acetone Oils
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Columnian Spirits
Wood Alcohol
Creosote Oils
Formaldehyde
Methyl Acetate
Methyl Alcohol
Methyl Alcohol Pure

Made in Canada

Standard Chemical, Iron and Lumber Co.
OF CANADA, LIMITED

MONTREAL TORONTO WINNIPEG

Dominion Steel Corporation

Earnings Last Year Showed a Decline, but Company's Position is Strong

After deducting all operating expenses, repairs and maintenance and business profits tax, the net earnings of the Dominion Steel Corporation for the year ended March 31st last, amounted to $8,768,054, as compared with $11,030,122 in 1918. After all deductions, including interest on bonds and the regular dividends on the preferred shares, net profits on the year's operations amounted to $5,470,468, against $7,601,660 in 1918, and $8,221,165 the previous twelve months.

Earnings were at the rate of 17 per cent. on the outstanding common stock of the Corporation, against 23.7 per cent. in 1918 and 9.4 per cent. in 1916.

After deducting the disbursements to holders of the common shares from the net profits for the year, there remained to be added to the previous balance of profit and loss account the sum of $3,705,904, bringing the total up to $17,459,251. From this balance there was deducted as a reserve for contingencies, including Government taxes for the Corporation's fiscal year, the sum of $1,000,000, while the generous amount of $8,500,000 was transferred to a new general reserve fund, which is shown in the balance sheet exhibit at $11,500,000, the new reserve including the item of $3,000,000 shown in last year's statement as "special Reserve."

The balance sheet discloses an excellent financial position. The working capital of the Corporation, standing at in excess of $14,000,000, while some $3,700,000 less than that of a year ago, is, nevertheless, a comfortable one for a period like the present.

Branching Out in France

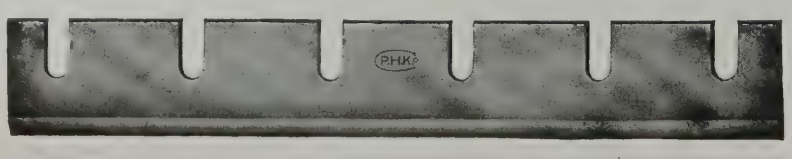
Royal Bank of Canada Establishes a French Subsidiary in Paris

Announcement was made last month by the Royal Bank of Canada that the Royal Bank of Canada (France) had been organized to transact a general banking business in France. Offices have been opened at 28 Rue du Quatre-Septembre, Paris, with Mr. William Warren as manager and Mr. N. G. Hart assistant manager. As the Royal Bank of Canada (France) will have at its command all the facilities afforded by the numerous branches of the parent institution, it is in an exceptional position to extend a complete banking service on favorable terms.

Manufacturers of

Industrial Alcohol
Non-Potable Spirits
Cologne Spirits

J. P. WISER & SONS, Limited
Distillers
PRESCOTT - - - ONTARIO

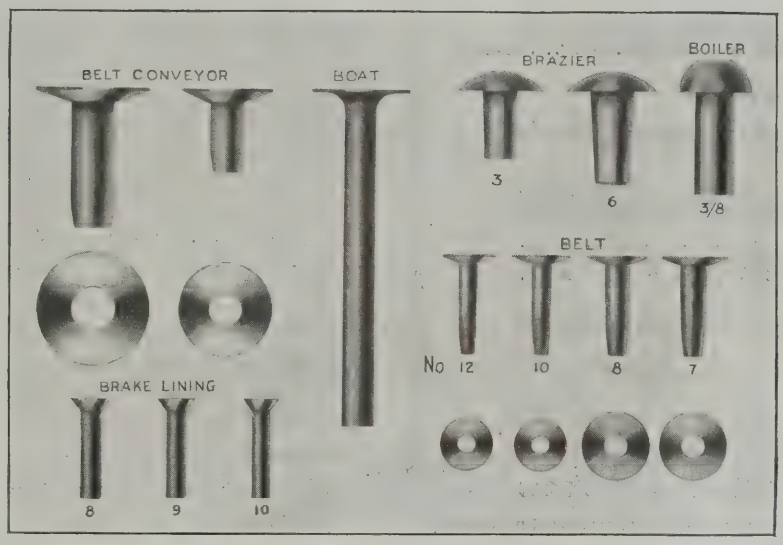


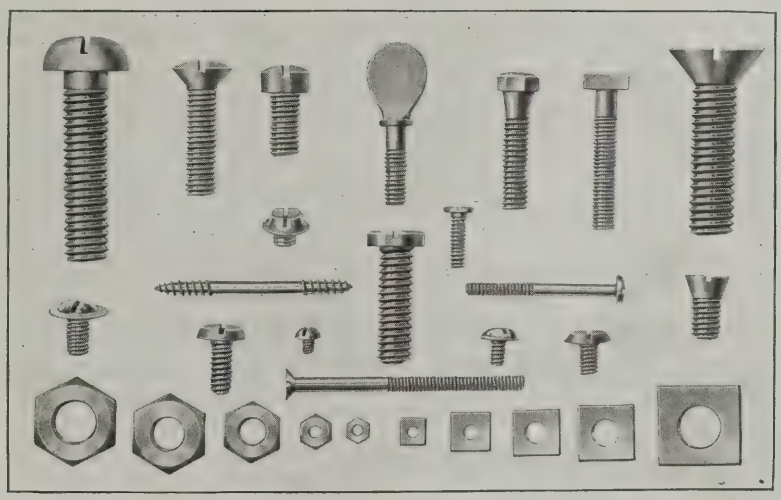
Pioneer Manufacturers of Machine Knives and Metal Cutting Shear Blades in Canada.
THE PETER HAY KNIFE CO., LIMITED
GALT, ONTARIO

MACHINE SCREWS - STANDARD - COPPER RIVETS

BRASS
BRONZE
STEEL

ROUND
FLAT
FILLISTER
BINDING
BUTTON
WASHER
HEADS
for
IMMEDIATE
SHIPMENT





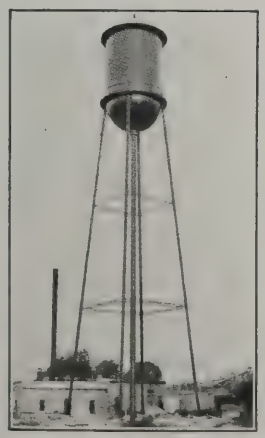
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BELT
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BRAKE
LINING
BRAZIER
BOAT

THE STOWELL SCREW CO., LIMITED

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CANADIAN CHICAGO BRIDGE AND IRON COMPANY
Limited
Bridgeburg, Ontario
ELEVATED STEEL TANKS
For Municipal, Railroad and Factory Service
Storage Tanks, Self-Supporting Steel Stacks and All Classes of Heavy Plate Metal Work

Write our nearest sales office to-day for prices, plans and specifications. Our catalogue No. 25 gladly mailed to you, upon request.

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ESTABLISHED 1875
The Boiler Inspection and Insurance Co. of Canada
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Issues Policies of Insurance after a Careful Inspection of the Boilers Covering Loss or Damage to Property and Loss Resulting from Loss of Life and Personal Injuries. Policies Guaranteed by The Hartford Steam Boiler Inspection and Insurance Company.
Assets for Security of Policyholders, $4,552,020.43.

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For Full Information Write for Catalog I
Canadian Mathews Gravity Carrier Co., Ltd.
PORT HOPE, ONT.

Appeal Dismissed

Unanimous Judgment of Court of Appeal Dismissed Action Against the Boeckh Company, Ltd., with Costs

It is interesting to note that the recent judgment handed down by the Court of Appeal affirms the judgment of the Trial Judge, dismissing the action brought against Messrs. The Boeckh Company, Ltd., to prevent their using the descriptive words "Rubber Set."

On another page of this paper the public is advised of this judgment in order that there may be no possibility of their being misled as to the right of Messrs. The Boeckh Company, Limited, using the words "Rubber Set" to indicate the process by which their genuine "Rubber Set" brushes are made.

The word Rubberset or the words "Rubber Set" are held to be the only words which accurately and absolutely describe how the brushes, which have a rubber setting, are made, and no person has, or can have, a monopoly in the use of such word or words.

Big Tannery Rebuilt

Plant of the Hastings Tanning Company, Limited, Restored After Big Fire

Reconstruction of the tannery of the Hastings Tanning Company, Limited, at Hastings, Ont., is now nearing completion. The old tannery was burnt down some time ago, and work on its re-erection was commenced last October. The Breithaupt Leather Co. of Kitchener, of which the Hastings Tanning Co. is a subsidiary, furnishes the following information about the new plant:—

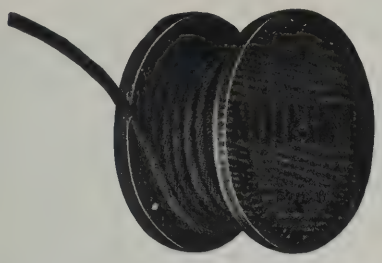
"The new buildings are all of most substantial construction, being built of concrete blocks made on the premises, the walls being 16" thick. The main building is 200' x 130', two stories high and covers the main tannery, including beam house and tan yard on the ground floor, and drying space on the second floor.

"The rolling house and finishing department comprises a two-storey building, 60' x 160', and is nearing completion. The leach house and other buildings are under construction and it is expected that the buildings will all be completed and ready for operation in the near future.

"The tannery will be of first-class construction and equipment throughout with new and improved machinery of the latest type. This plant is built throughout, especially for the manufacture of 'Trent Valley Oak' sole leather, and will have a large capacity. The quality of the water of the Trent River is particularly well adapted for the production of this high-class oak sole leather.

"The company has its own water-power plant on the Trent River adjoining the tannery, which is available, without interruption throughout the whole year The tannery site along the river bank comprises a plot of land of somewhat over ten acres in extent. There will therefore be ample room for expansion to meet the growing demands of the home and foreign markets."

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Agencies in the leading countries of the World.
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Ships' Rigging, Elevators, Cranes, Hawsers, Towing Lines, Etc.

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GALT KNIFE CO., LIMITED

GALT - - - ONTARIO

THE CANADIAN BRIDGE CO., Limited

WALKERVILLE, ONTARIO

Montreal Office: New Birks Building

MANUFACTURERS

RAILWAY AND HIGHWAY BRIDGES

Locomotive Turn Tables. Roofs, Steel Buildings and Structural Iron Work of all Descriptions

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Roof Trusses,
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Commencing with June the company has begun the publication of a house organ called the *Bowser Boomer*. It tells all about the reorganization, gives a number of interesting illustrations of the Canadian works, and describes various lines manufactured therein.

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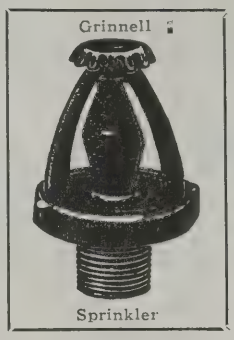
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CANADA'S TRADE IN THE ORIENT

This is an interview with a Canadian export merchant who had spent three months touring the markets of the Orient. In his opinion China offers a great market for Canada, and now is the time for this country to mould her Pacific trade with a view to capturing a large share of Chinese business.

(From the "Vancouver Sun.")

Among the passengers on the S.S. Empress of Russia who recently returned to Vancouver, was Charles S. Meek of the firm of Charles S. Meek & Company, Ltd., who has been on a three months tour of the Orient in connection with placing Canadian goods on the markets of the Far East.

Mr. Meek stated that he was never more impressed in his life than when he viewed the expansive field for business in the Orient and so close to Vancouver.

"The people of the great centres across the Pacific do not know there is a Canada, or if they do they attach about as much importance to it as we give to the area within the Arctic circle," said Mr. Meek. "Canada is part of the United States when you come to talk to the people of China, and the reason is that for every trade advocate Canada has in the Orient, there are thousands of men whose business houses are located in the United States.

"I spent days in Shanghai, strolled the docks and along the famous Bund, and the only indication I saw of Canadian goods being imported into that great commercial city, with its millions of people and hundreds of steamers loading and unloading, were lumber from the Dollar boats and Powell River pulp.

"Now is the time for the Canadian to sell his goods in China; it is China's buying time, as the Mexican dollar is worth double what it could bring a year ago. Consequently China is seeking all the goods she can get at present and taking advantage of the increase in the exchange."

The Canadian Commissioner

Mr. Meek expressed great regret at the fact that the Canadian Trade Commissioner is located in a little office in a most out-of-the-way place, and that practically nothing is known of the fact that Canada is a manufacturing country. "This is further regrettable," continued Mr. Meek, "in the face of the fact that the British Commercial Attache and his staff has done much to establish a bond of confidence between the British and the Chinese in all commercial dealings, and that the Attache is anxious to foster trade within the Empire; consequently Canada could benefit to a marked extent by the pioneering of the British authorities.

"We must give China what she wants, not what we want to give her," said Mr. Meek with emphasis. "Once established in the good graces of the Chinese through the agencies of his compradore—there is no receding as long as the goods and dealings are with that degree of honesty which the Chinese demand in all their commercial transactions."

Mr. Meek pointed out that during the war certain countries had lost the confidence of the Chinese merchants by substituting commodities for those of long standing trade and by depreciating the value of keeping every line of their commercial relationship up to the standard. Despite the fact that Britain was one of the most involved nations in the war, no receding was to be found in the class of goods shipped to China nor the honor with which she met her obligations with this exacting country. This, said Mr. Meek, is indirectly of great value to Canada and should be taken advantage of



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while the particular matters are still fresh in the minds of that great purchasing nation.

On his travels through the Far East, Mr. Meek found that he was the first general export merchant who had visited the East from Canada, and business men flocked from many outside points, when they heard he was in Hong Kong and Shanghai, to discuss other lines of goods with him than those which they were handling, in the hopes of expanding their trading capabilities and taking on additional lines of manufactured articles.

From Manila to Vladivostok, Vancouver's trade missionary found that much the same conditions existed, namely, Canada was nearly unknown, despite her advantageous location in relation to the Orient.

In the Philippines, Mr. Meek came to the conclusion that it will not be long before that little country will be given her independence, and will be governed entirely by her own people. "Then and not until then can any country but the United States do business with the people of these islands," said Mr. Meek.

Hong Kong being a British port was not a difficult place to do business in, and recently the demands from this district are increasing to an enormous figure.

At Vladivostok, Mr. Meek stated that the place is so far gone into degradation and uncleanliness that people are not anxious to do business, but he was strongly impressed with the possibilities of the country if General Kolchak can only bring about a settled Government.

Vast quantities of farm machinery and implements are lying all over the hills around Vladivostok with nothing but tarpaulins to keep the weather off, with the result that the waste is enormous. But at this point Mr. Meek paid a compliment to the masterful little Czecho-Slovak soldier who is doing his best to keep peace and order in a city of murders and robberies. Financial trading equilibrium and the Trans-Siberian Railway put into commission will do much to bring Vladivostok out of its chaotic condition.

"What about trade with Japan?" queried the *Sun* representative. "Canada need not look to Japan for much in the line of trade only in commodities and manufactured goods which it is absolutely impossible to grow or purchase in Japan. That country is now purchasing all the machinery possible to secure, and will soon be rushing huge quantities of manufactured articles onto the Pacific markets.

"China is our logical market," reiterated Mr. Meek, "and now is the time for Canada to mould her Pacific trade accordingly."

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The anual statement of the Canadian Converters Company, Limited, placed in the hands of the shareholders last month, showed that all previous records both as to earnings and financial strength have been broken. Earnings for the year ended April 30 last were $257,324, an increase of $39,435, or 18.5 per cent., over the showing in this respect in the 1917-18 period, and $53,320, or in excess of 26 per cent., over the previous fiscal year of the company. After deducting bond interest, depreciation allowance and setting aside the sum of $30,000 as a reserve for 1918 war tax and bad debts, there remained available for application to distribution on the outstanding stock of the enterprise $176,384, representing an earnings capacity of 10.2 per cent. on the shares, compared with 8.4 per cent. last year and 8 per cent. in the 1916-17 period.

INDUSTRIAL CANADA

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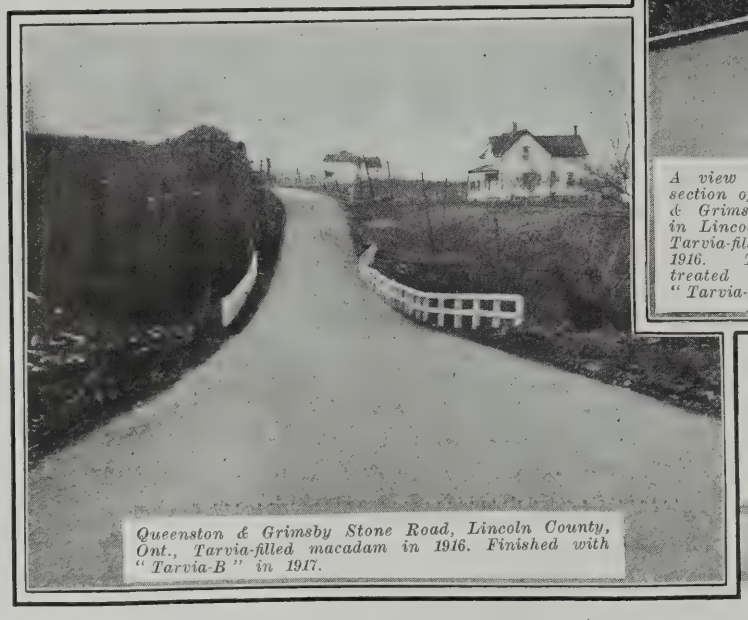
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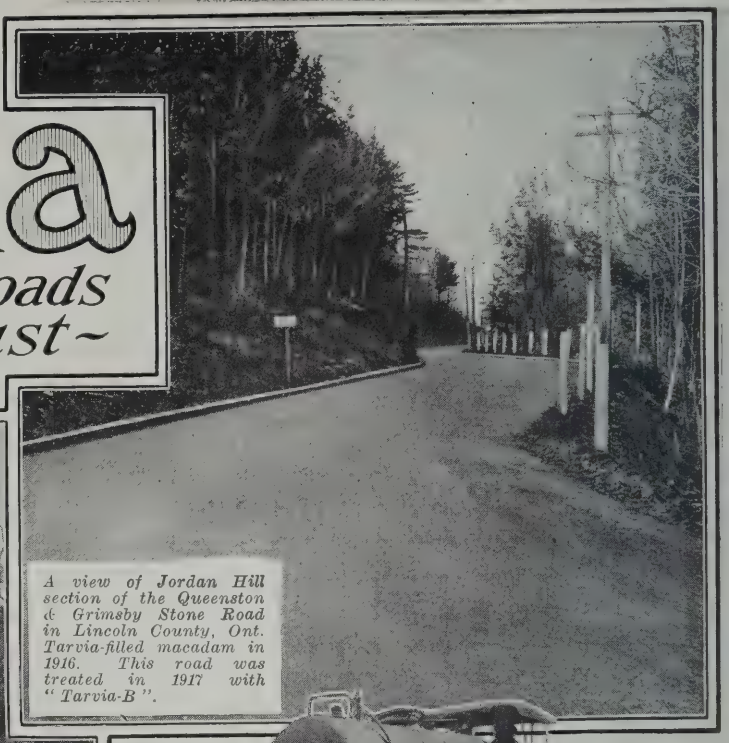
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A view of Jordan Hill section of the Queenston & Grimsby Stone Road in Lincoln County, Ont. Tarvia-filled macadam in 1916. This road was treated in 1917 with "Tarvia-B".



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Chairman, Lincoln County Roads.

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INCORPORATED.

Vol. XX. TORONTO, AUGUST, 1919 No. 4

Editorial Comment

The Farmers' Political Party.

THE formation of "The Farmers Political Party," following the recent Farmers' Convention at Calgary, is reported in the *Manitoba Free Press*. This Party is organized through, but is distinct from the farmers' organizations in Western Canada. The new Party has adopted the farmers' platform drafted by the Canadian Council of Agriculture. The object of the Party appears to be entirely political and will head an agrarian movement in the Western Provinces by selected candidates of its own choosing for Parliament and the Legislatures.

The Installation of Automatic Sprinklers

IT has been clearly demonstrated that the installation of automatic sprinklers is an effective means of fire prevention, and statistics are available to show that the cost of the installation of sprinklers can be saved in a varying number of years through reduction of insurance premiums. Several proposals have been made to secure the enactment of legislation making the installation of automatic sprinklers compulsory in certain classes of buildings. We understand, however, that the Government's Insurance Department has decided to inaugurate a campaign of education before recommending such a drastic step as compulsory installation. By applying to the Superintendent of Insurance, Ottawa, manufacturers can secure an inspection of their plant by an expert on automatic sprinklers. The expert will state the cost of installation, the probable reduction of insurance premium resulting from the installation, and the type of sprinklers which are best suited for the plant in question.

Membership

THERE should be no manufacturers in Canada who are not members of this Association. It should be the business of members to see that non-members are persuaded to join. The cost of fighting the Association's battles is steadily increasing because at the present time manufacturers seem to have been selected as the central object of attack from the various classes of the population.

Increasing demands for service are being made upon the Association's Transportation, Tariff, Legal, Insurance, Commercial Intelligence and other technical departments.

These expenses are borne by the members in the shape of fees and the fewer the members the higher will be the fees. Every new member who comes in helps to bear the burden; and these non-members should be in, because they as well as the members benefit from the Association's activities.

A great effort will be made during the coming year to turn the non-members into members. A campaign will be started in each of the five Divisions of the Association. The President has made a special appeal that each member of this Association should make an effort to secure at least one new member.

The President hopes that each member will accept an individual responsibility during the coming year in regard to increasing the membership of the Association.

A Permanent Tariff Board

THE resolution passed at the Annual Meeting of this Association, asking the Government to create a permanent Tariff Board, which would revise the tariff from time to time on a scientific basis as necessity arose, is receiving considerable support from organizations of labor, agriculture and business. The suggestion that the tariff, being highly technical, should be a subject of constant study by men who represent no particular class of the population, but whose sole aim is to adapt the tariff to the needs of the country, is finding widespread favor. It is not suggested that this Board should have legislative power. It would only have powers of investigation and recommendation, similar to those possessed and exercised by the Tariff Commission of the United States. The creation of such a Board should almost eliminate the constant argument concerning tariff matters, which is waged between manufacturers on the one hand and certain farmers' organizations on the other. For several years this Association has tried to establish better relations with the grain growers' Associations of the West, and frequent conferences have been held between the business and agricultural interests of the country. The tariff should not be treated as an abstract theory, but as a business proposition. Practically all the civilized countries of the world have a

tariff of some sort, which serves either to collect revenue or to protect home industry, or both. It would be impossible to set up a standard tariff for all countries. Each country's tariff must be shaped to serve the particular needs of that country.

In Canada the manufacturers understand that they must produce good articles, pay fair wages, and sell at fair prices, if they are to maintain a good standing in the home market. The farmers are one group of business men, the manufacturers are another group. Both groups are equally interested in securing national prosperity. One of the chief requisites for national prosperity is to secure national stability, and this cannot be maintained for any period of time when there are frequent periods of uncertainty in regard to what sort of a tariff will be in effect. Canadians of all classes want a fair tariff, which will suit the great majority of the people. They want a stable tariff, which will keep business steady, and allow business men to make their plans several years ahead. They want, also, to get rid of the endless discussion and vague controversies which have been raging about the Canadian tariff for the last fifty years. They appear to believe that a Tariff Board would do much to attain these desirable results.

National Industrial Conference

ARRANGEMENTS are being made by the Minister of Labor to hold a National Industrial Conference in Ottawa during the week beginning September 11th next. Sir Robert Borden will act as Chairman. Delegates from Labor organizations and from various classes of employers are being invited to attend.

The stated object for calling the conference is to attempt to arrive at an understanding on certain questions which have been and are the subject of controversy between employers and employees. The Minister of Labor hopes that the conference will be instrumental in removing some of the causes of present industrial unrest in Canada, and will bring about a larger measure of co-operation in industry.

This Association has been entrusted with the task of selecting the delegates who will represent the manufacturing interests. Preparations, for the conference and the selection of delegates are in the hands of the Industrial Relations Committee, which was created at the last Annual Meeting.

There is no doubt that there should be more co-operation in industry. It should not be forgotten, however, that co-operation brings with it responsibility. If the conference is conducted in the true spirit of compromise, something should be accomplished. If, however, it is being made the means of forcing extravagant demands upon manufacturers to the attention of the public, little real benefit will be derived from it. The public, during the last six months, have realized very keenly that they are interested in industrial disputes, because they must pay the cost, indirectly, to a large extent. If the attitude of Labor is all take and no give, and if demands rising out of this attitude are met, it simply means that the cost of living will be higher.

The conference could do nothing better than concentrate on the problem of increasing the production of the country, because only vastly increased production will bring down the high cost of living. Prices are high now chiefly because there is a world-wide famine in nearly all articles which are consumed. These articles are dear because they are scarce and they will continue to be dear until they become plentiful again through an increase in production.

The Instability of Business Conditions in Canada

CANADIAN manufacturers have to struggle not only against the natural obstacles which stand in the way of restoring business to normal conditions, but they also have to contend against unnecessary handicaps. From November of last year until May of this year they were in a state of uncertainty as to what tariff changes would be announced in the Budget. At the same time, certain labor organizations, through their radical leaders, seemed determined to enforce demands intended to limit, and in some cases, to stop production.

Investigations and restrictive laws produce as their chief result confusion in the business world without visible relief to the consumers.

The manufacturers of this country did a great deal to solve the tremendous threat of unemployment which hung over this country when the armistice was signed. If business were allowed to take its natural course, under the law of supply and demand, the country would return much more quickly to normal conditions and the cost of living would decline.

Bolshevism or Trade Unions?

"BOLSHEVISM or trade unions, which?" is the title of a pamphlet published by Mr. Gustave Francq, the well-known Labor Leader, who is Managing Director of the *Labor World,* Montreal.

Mr. Francq has made a careful study of Bolshevism and quotes, among other documents which he has consulted, the report of Mr. David S. Francis, United States Ambassador to Russia, to the Senate at Washington, and also the British White Paper, compiled by the British Foreign Office and tabled in the House of Commons last April.

"The Bolshevist system is contrary to the development of democracy because it is nothing short of a dictatorship based on crime, injustice and inequality before the law," says Mr. Franq; "it is intolerance itself and has adopted for its motto: *Liberty in its widest form for a class but complete oppression for the others.*"

Mr. Francq reprints a number of opinions expressed on the subject of Bolshevism. Among these are the follow-

ing by Mr. Samuel Gompers, President of the American Federation of Labor:

"In theory Bolshevism is an impossibility. In fact, if it were put into operation, or could be put into operation, it would mean the decadence or perversion of the civilization of our time. To me the story of the desperate Samson who pulled the Temple down on his head, is an example of what is meant by Bolshevism. I am not willing that all of the genius of past ages should be flung to the wind. And I am not willing that the little service that I may have been able to render during the long years that I have attempted to improve conditions in a constructive way should be destroyed by maddened desperation. And so I may say to you that it is well for us to see now that our own house is kept in order."

Mr. Francq then contrasts the constructive work which is done by international trade unionism with the destructive tendencies of Bolshevism. Speaking of the international Trade Union movement, he says:

"It is opposed alike to Bolshevism amongst employers as well as employees. It speaks for labor and society in their real and best sense."

Mr. Francq has presented his case clearly, and reasonably, and the pamphlet will bear close study.

The Place of Middlemen

A DEFENCE of middlemen, more particularly the retail merchant, was delivered by Mr. E. M. Trowern, Secretary of the Retail Merchants' Association, before the Royal Commission on Industrial Relations. Mr. Trowern contended that distribution is as important as production, and that those engaged in distribution are as indispensable to a country as those concerned with production. Distributors justify their existence because they perform certain services for the community which the community cannot do without. He stated that the middlemen are being attacked by persons who do not understand the importance of the services rendered. "These persons," says Mr. Trowern, "advocate among other things the following:

1. The abolition of the middlemen.
2. Direct purchase and sale between producers and consumers.
3. Municipal trading in coal, wood, milk, and other articles of common use.
4. Public retail markets to enter into competition with tax-paying retail merchants, who carry vegetables all the year round, whereas consumers cannot buy vegetables in the market when the thermometer is below freezing point.
5. Without knowing the unsound commercial basis upon which so-called co-operative societies are established, they advocate their adoption.

"Retail merchants have been on earth for centuries, and they will be here for all time," prophesies Mr. Trowern. "You can devise no plan which will abolish them, as they are an important part of every locality."

There is no doubt that we must have distributors as well as producers, and it is impossible to decide which is the more important class.

Both wholesale and retail merchants perform a necessary and valuable service in the political economy of the country. If the community insists upon having the services which are furnished by wholesalers and retailers and other distributors, the community must be prepared to pay a fair return for such services. There is a great deal of loose talk about abolishing certain classes of the population. Artificial action secures very little result in such cases. The iron laws of supply and demand quickly eliminate an unnecessary class. Proposals to abolish all middlemen who operate between the producers and ultimate consumer are very attractive, but most of them fail when they have to explain how the services now rendered by these middlemen are to be supplied in their absence. The more highly civilized a country becomes, the more classes there are in the population, the more stages there will be between the producer of raw material and the ultimate consumer of the finished goods, and consequently the more middlemen. It must not be forgotten, moreover, that the great class of middlemen and their families form a very large percentage of the consumers, and are, therefore, buyers of the producers' goods.

It is necessary, however, to maintain the proper proportion between the classes. There should not be too many distributors in proportion to the number of producers. Moreover, if the profits of the producers are to be limited, it seems reasonable to assume that the profits of the distributors should be investigated also, and if necessary, limited as well.

British Labor Minister's Appeal.

SINCE the signing of the armistice the industrial community in the British Isles, and indirectly the whole population, have confronted a succession of crises, which threatened the whole social fabric, and menaced the commercial supremacy of the British Empire. The gravity of the situation caused Sir Robert S. Horne, Minister of Labor for Great Britain, to make the following statement:

"Any man who is unprepared to put forth an effort even greater than that he made during the war mocks the dead he professes to glorify. They died to preserve their country. If men are unwilling to exert all their power in peaceful production and honest toil, the country will be ruined as irretrievably as if the Hun had invaded it and spread his devastating hand over it.

"No class is free from criticism. Many manufacturers are profiteering at the expense of the community. Many workmen are refusing to give an adequate day's work for the service of the country. As a result of these two factors Britain is becoming impoverished. Unless there is a great awakening this nation, which has proved its courage and capacity for sacrifice, will go down to disaster through failure to use victory wisely.

"Far better in such a case would it have been to have been beaten on the field of battle and to have returned with a chastened spirit to retrieve our fortune by persistent toil. At the present time our production of almost all that is essential for the continuance of the country's success has reached a dangerously low level. The output of that prime necessity, coal, is imperilling every industry we possess.

"It is the duty of every right thinking citizen to be a missionary preaching the gospel that in work alone lies safety. It should be the pride of everyone to bear this banner in this new crusade."

Similar conditions prevail to a varying degree in other countries, but the situation is especially dangerous for Great Britain, a country which has built up its commercial supremacy on its merchant marine, its highly specialized manufacturing and its coal industry. If the

cost of production in these three services is doubled or trebled, it is difficult to see how Great Britain can continue to import the greater part of her raw material, manufacture in the British Isles, and send it out again as finished products to all parts of the world in the face of international competition.

British Industries Fairs, 1920

THE prospectus of the British Industries Fairs, 1920, has been published by the British Board of Trade. Three fairs, to be held in London, Birmingham and Glasgow, from February 23rd to March 5th, 1920, are included in the programme. The three fairs, although held in different cities, are in reality one fair. The London fair is directly organized by the Board of Trade, while the fairs in Birmingham and Glasgow are organized by the municipalities of the respective cities under the auspices and with the support of the Board. The three fairs will be held concurrently, each fair representing a specified group of industries, and no one industry will be permitted to exhibit at two fairs. The London fair will be held in the Crystal Palace, London. These fairs will be an object of special interest to Canadian manufacturers owing to the probable increase of trade between Canada and the United Kingdom.

A full description of the British Industries Fairs of 1920 appears elsewhere in this issue, and is reproduced from the Weekly Bulletin No. 801 of the Department of Trade and Commerce.

A Definition of Collective Bargaining

By G. E. CARPENTER
Secretary, Prairie Provinces Division, C.M.A.

PROBABLY nothing is of more immediate interest to our members than the agreement upon the vexed question of "Collective Bargaining" that was reached between the employers in the metal trades, a committee from the running trades of the railway men, and which was endorsed by the Minister of Labor, Senator Robertson. In order that our members generally may have a record of just what this agreement provided for, same is given below:

A series of statements defining the real status of "Collective Bargaining," as it relates to the Winnipeg strike, were issued June 16th, 1919, and are reprinted as a matter of historical record. The statements were made by the iron-masters engaged in the original dispute, the International Officers of the running trades, and the officials of the great transcontinental railway corporations at Winnipeg. The record, which was the basis of the subsequent settlement of the metal workers' dispute, is as follows:

Metal Employers Define Their Position

TO THE CITIZENS OF WINNIPEG: Winnipeg, June 16, 1919.

The undersigned learn that certain railroad employees have taken part in the sympathetic strike, using as justification for their act the claim that the metal trades employers have failed to properly recognize and concede the principle of collective bargaining to metal trade employees.

We believe that there is, and has been material misunderstanding in connection with our recognition of the principle of collective bargaining, and in an endeavor to once more place the position of the metal trades clearly before all interested, do make the following statement:

Privy Council Order No. 1743, passed in July, 1918, by the Dominion Cabinet, in part, provides as follows:

"2. That all employees have the right to organize in trade unions, and this right shall not be denied or interfered with in any manner whatsoever, and through their chosen representatives should be permitted and encouraged to negotiate with employers concerning working conditions, rates of pay, or other grievances."

The above quoted portion of the Federal Government's defined policy on this question we believe should be accepted by those interested, and our desire has been to recognize and concede its applicability to the operation of our respective plants.

We have endeavored on several occasions to place concretely in writing our intent and desire relative to the question of collective bargaining, but evidently we have failed to clearly outline our views and desires in that connection, and we, therefore, in the hope of clearing up entirely any misunderstanding on the part of our employees, and on the part of the general public, and the very much interested citizens of Winnipeg, we submit the following as our declared policy on the question of collective bargaining:

1. Employees shall not be discriminated against by employers or other employees on account of membership or non-membership in any craft or organization.

2. The members of the various trade organizations employed in the undersigned metal trade shops shall have the right to present and negotiate schedules covering wages, hours and working conditions, with individual employers, or collectively with the employers of the metal trades.

3. The employees who are members of the various metal trade organizations in the contract shops (not including rail-

Suggestion to Manufacturers

Canadian manufacturers who are interested in seeing that home products get the preference in the domestic markets might well take example from the action of Messrs. Rous & Mann, Ltd., Toronto, who enclose the following exhortation in the pay envelopes of their employees:

GIVE THIS YOUR CONSIDERATION—IT AFFECTS EVERY ONE OF US

For every million dollars retained in Canada by a refusal to buy other than Canadian goods, a year's continuous employment can be given to at least 1,000 people.

No goods purchased abroad are cheap that take the place of our own labor and our own raw materials. Spend your money at home and help yourself and your country.

By supporting home industries you develop the home market, encourage export trade and reduce imports. Every dollar spent for goods produced by Canadian labor means better conditions for Canadian workers.

Build up the home market. The president of the Bank of Commerce says: "Every dollar's worth we buy abroad means that a dollar's worth of work has been diverted from a Canadian workman." Make your money support home industries.

DEMAND GOODS MADE IN CANADA

way shops) shall have the right to elect representatives from among the employees of the firm or firms involved.

4. After agreements have been reached and schedules signed, as by the above-mentioned method, grievances or differences that may arise shall be taken up as follows:

(*a*) All complaints and grievances to be adjusted, if possible, by the superintendent in charge.

(*b*) When adjustment cannot be made between the superintendent and the craft directly interested, the matter shall be taken up with the company by the committee representing the craft involved, and they shall endeavor to reach a mutual understanding.

(*c*) In the event an understanding cannot be reached by the company and the representatives of the craft or crafts involved, the committee representing all of the trade unions employed by the firm or firms concerned, will meet, and try to bring about an adjustment of such differences or grievances.

5. In case of failure on the part of said representatives to effect a satisfactory settlement of any schedule, negotiations or grievances with the firm or firms concerned, the duly accredited international officers of the metal trade organizations shall be called upon to assist in effecting a settlement.

6. During the period of negotiations, conducted as outlined above, there shall be no lockout on the part of the employers, or strike on the part of the employees concerned.

(Signed) VULCAN IRON WORKS,
Per E. G. Barrett.
(Signed) MANITOBA BRIDGE & IRON WORKS,
Per H. B. Lyall.
(Signed) DOMINION BRIDGE CO.,
Per N. W. Warren.

Satisfactory, Says Minister of Labor

Winnipeg, June 16, 1919.

I have been handed a copy of the declaration of policy issued to the public by the Vulcan Iron Works, the Manitoba Bridge & Iron Works, and the Dominion Bridge Company, respecting the recognition of the principle of collective bargaining in their several plants.

The policy outlined is a full and complete recognition of collective bargaining, as generally interpreted and applied, and is entirely in accord with the established practice on our Canadian railways. It should, in my opinion, be accepted as satisfactory to labor.

(Signed) G. D. ROBERTSON,
Minister of Labor.

Identical With Railway Practice

Winnipeg, June 16, 1919.

The undersigned representatives of the train service organizations, being familiar with the method of collective bargaining as practised by the organizations we represent, endorse the policy of collective bargaining as outlined by the metal trade employers in their announcement of this date, being in principle and effect the same as that enjoyed by these organizations.

(Signed) ASH KENNEDY,
Asst. Grand Chief Engineer, Brotherhood of Locomotive Engineers.
(Signed) GEO. K. WARK,
Vice-President, Brotherhood of Locomotive Firemen and Enginemen.
(Signed) JAMES MURDOCK,
Vice-President, Brotherhood of Railway Trainmen.
(Signed) H. E. BARKER,
General Chairman, Order of Railway Conductors.
(Signed) D. MCPHERSON,
General Chairman, Order of Railroad Telegraphers.
(Signed) A. MCANDREWS,
Acting General Chairman, Maintenance of Way Employees.

Railway Managers Say Recognition Adequate

Winnipeg, June 16, 1919.

The undersigned have read the letter dated June 16, 1919, addressed to the citizens of Winnipeg, by the Vulcan Iron Works, the Manitoba Bridge & Iron Works, and the Dominion Bridge Company.

In our opinion the proposals contained therein provide for the application of the principle of collective bargaining in exactly the same manner as that principle is applied in agreements between the railway companies and the various bodies of organized employees, and should constitute a fair and just settlement of the question of recognition in dispute between the metal trades employers and their employees.

(Signed) D. C. COLEMAN,
Vice-President, Canadian Pacific Railway Company.
(Signed) A. E. WARREN,
General Manager, Canadian National Railways.
(Signed) W. P. HINTON,
Vice-President and General Manager, Grand Trunk Pacific Railway Company.

A British View of Canada

(From the "London Times" Trade Supplement)

The intelligently directed organization and enterprise which are being employed by Canadian manufacturers and merchants in their endeavors to secure a full share of the markets of the world for the Dominion, will undoubtedly produce remarkable results in the near future. Although Canada has borne her full share of the burden of the war, circumstances have combined to favor the continued development of the country, and to increase its manufacturing capacity to a very considerable extent. The cessation of the output of munitions consequent on the conclusion of the war brought with it the need for converting machinery to peaceful purposes and for securing new markets for Canadian products. By the granting of large credits to Belgium, Roumania, and other European States, Canada has secured an entry into various Continental markets. At the Lyons Fair this year most of the Canadian exhibitors displayed explanatory literature, printed in several European languages. Furthermore, offices and showrooms are being opened in both Paris and Brussels by the Export Association of Canada. Canadian trade commissioners have been established in most of the important countries of the world for some years past. They are "live" men, and their work has undoubtedly been very valuable to Canadian exporters. The Canadian Trade Mission in London is also rendering good service in the development of Canada's export trade. All this shows that Canada is becoming more and more important as a manufacturing State. Although the population of the Dominion is still under 9,000,000, and its chief industry is and will long remain the production of foodstuffs, the industrial development of the country is going ahead so fast that Canada must soon become an active competitor in many of the world's markets. This will be hastened in one way which was perhaps unforeseen when Imperial Preference was first proposed. In order to take advantage of the preferential treatment of British-made goods American manufacturers, in constantly increasing numbers, are establishing branch factories in Canada. American capital is, therefore, being employed in the industrial development of the Dominion to some extent at the expense of that of the United States. Whatever political effect this extension of the close ties between the Dominion and the Republic may have, it is clearly highly advantageous to Canada's industrial progress.

One remarkable advantage Canada possesses for attacking the Continental market is the presence of two and a half millions of French-speaking people in the Dominion. This means that there is seldom much difficulty about securing a thoroughly competent French-speaking representative. French is still the most useful language over a large area of Europe.

News and Views of the Association

There will be found each month in this department a record of the various activities of the Canadian Manufacturers Association during the preceding month. The information is supplied to INDUSTRIAL CANADA officially, and all members of the Association are urged to acquire the habit of reading and checking over the contents of the department carefully in order to keep themselves posted on the work of the Association

Our New Members for July

Sixteen applications for membership in the Association were considered by the Membership Committee at its meeting on July 29, and duly accepted. Five of the sixteen represented additional members, the balance being new members. The latter were as follows:—

Firm.	Address.	Product.
James M. Burns	Rexton, N.B.	Lumber.
Halifax Shipyards, Ltd.	Halifax, N.S.	Ships and repairs.
Four Wheel Drive Auto Co., Ltd.	Kitchener, Ont.	Trucks, trailers, etc.
Corn Products Co., Ltd.	London, Ont.	White corn products.
Dominion Brake Shoe Co., Ltd.	St. Thomas, Ont.	Brake Shoes and parts
Henry Davis & Co., Ltd.	Toronto, Ont.	Baby's wear.
International Machine & Manufacturing Co., Ltd.	Toronto, Ont.	Phonograph motors.
Shell-Bar Boico Supply, Ltd.	Toronto, Ont.	Boiler compound, grate bars, belt dressing.
Edestrand Foundry Co.	Welland, Ont.	Gray iron castings.
L. Chaput, Fils & Cie., Ltee.	Montreal, Que.	Food products.
Page & Shaw Canada, Ltd.	Montreal, Que.	Chocolates, confectionery.

The following additional representatives have been accepted:—

Name.	Firm.	Address.
Geo. A. Schryer	Bathurst Lumber Co., Ltd.	Bathurst, N.B.
A. E. McLean	Bathurst Lumber Co., Ltd.	Bathurst, N.B.
G. E. McCarter	Eclipse Whitewear Co.	Toronto, Ont.
S. H. Chapman	Hurley Machine Co., Ltd.	Toronto, Ont.
Roger B. Hayes	Thompson & Norris Co. of Canada, Ltd.	Montreal, Que.

The Alberta Industrial Congress

The General Manager will attend the Industrial Congress and Tour, arranged by the Alberta Industrial Development Association, August 11 to 16. The secretary of the Maritime Division, Mr. H. R. Thompson, is being sent west by his Division to be present at the convention, and Mr. G. E. Carpenter, secretary of the Prairie Provinces Division, will also be on hand. The membership of the Association have been circularized with a view to arousing interest in this unique gathering and securing the attendance of a large number of manufacturers. While many expressions of approval of the objects of the Alberta Industrial Development Association have been received in reply to the circulars, it is not likely at time of writing that there will be any very large delegation from the east. Apparently the time has not been opportune to permit of many manufacturers getting away.

Winnipeg Members on Board

At the annual meeting of the Winnipeg Board of Trade held July 3, the following members of the Canadian Manufacturers' Association were elected members of the council of the Board:—N. J. Breen, assistant manager, Lake of the Woods Milling Co.; W. J. Bulman, president Bulman Bros., Limited; M. F. Christie, manager G. F. Stephens Co., Limited; John Stovel, president, the Stovel Co. Mr. W. H. Carter, president of the Carter, Halls, Aldinger Co., contractors, was elected president of the Board, and Mr. J. M. Carruthers, manager of the Crescent Creamery Co., was elected chairman of the Manufacturers' Bureau.

Resigns the Chairmanship

The Saskatoon section of the Prairie Provinces Division is at present without a chairman. Mr. F. M. Beatty, manager Cushing Bros., Saskatoon, who has been chairman of the section, is leaving Saskatoon to become manager of the Midland Woodworkers, Limited, formerly the Georgian Bay Shook Mills, at Midland, Ont. Mr. Beatty has rendered good service to the Saskatoon Branch and his associates in the western city regret his departure.

Basis of Importation

The following cable has been received by the Canadian Trade Commission from the High Commissioner in London:—

"Percentage of British Imperial origin in goods admissible under general license for goods produced within Empire reduced from seventy-five to sixty per cent., based upon value of goods at factory not on f.o.b. value."

Tariff Committee

At the meeting of the Tariff Committee held in the Association's head office, Toronto, on July 4th, the following additional members were elected:—

P. McMichael	Dominion Radiator Co., Ltd.	Toronto, Ont.
W. S. Fisher	Enterprise Foundry Co.	Sackville, N.B.
Thos. Cantley	Nova Scotia Steel & Coal Co., Ltd.	New Glasgow, N.S.
H. H. Champ	Steel Co. of Canada, Ltd.	Hamilton, Ont.
R. H. McMaster	Steel Co. of Canada, Ltd.	Montreal, Que.
J. D. Palmer	Hartt Boot & Shoe Co., Ltd.	Fredericton, N.B.
Jos. Daoust	Daoust, Lalonde & Co., Ltd.	Montreal, Que.
L. L. Anthes	Ames-Holden-McCready, Ltd.	Toronto, Ont.
Robt. Myles	Minister, Myles Shoe Co.	Toronto, Ont.
I. H. Weldon	Provincial Paper Mills Co., Ltd.	Toronto, Ont.
H. I. Thomas	J. R. Booth	Ottawa, Ont.
Carl Riordon	The Riordon Pulp & Paper Co., Ltd.	Montreal, Que.
C. Howard Smith	Howard Smith Paper Mills, Ltd.	Montreal, Que.
M. R. Lang	Powell River Co., Ltd.	Vancouver, B.C.
W. F. Humphrey	J. A. Humphrey & Son, Ltd.	Moncton, N.B.
E. Worth	Bonner-Worth Co., Ltd.	Peterboro', Ont.
I. Bonner	Penmans Limited	Paris, Ont.
L. L. McMurray	Gutta Percha & Rubber, Ltd.	Toronto, Ont.
R. E. Jamieson	Canadian Consolidated Rubber Co., Ltd.	Montreal, Que.
C. H. Carlisle	Goodyear Tire & Rubber Co. of Canada, Ltd.	Toronto, Que.
E. W. Hamber	British Columbia Mills, Timber & Trading Co.	Vancouver, B.C.
W. B. Tindall	Consumers Box & Lumber Co., Ltd.	Toronto, Ont.
W. E. Bigwood	Graves, Bigwood & Co.	Toronto, Ont.
Edwin Tomlin	British Columbia Cement Co., Ltd.	Vancouver, B.C.
F. P. Jones	Canada Cement Co., Ltd.	Montreal, Que.
R. L. Cliff	Pacific Milk Co., Ltd.	Vancouver, B.C.
Wm. H. Dunn	Borden Milk Co., Ltd.	Montreal, Que.
J. S. McLean	Harris Abattoir Co., Ltd.	Toronto, Ont.
O. W. Waller	Swift Canadian Co., Ltd.	Toronto, Ont.
S. J. Williams	The Williams, Greene & Rome Co., Ltd.	Kitchener, Ont.
W. S. Barker	Tooke Bros., Ltd.	Montreal, Que.
F. W. Stewart	Cluett, Peabody & Co.	Montreal, Que.
Geo. H. Douglas	Thornton & Douglas, Ltd.	Hamilton, Ont.
C. B. Lowndes	The Lowndes Co., Ltd.	Toronto, Ont.
Thos. H. Watson	Canada Machinery Corp., Ltd.	Galt, Ont.

John Muir	The Goold, Shapley & Muir Co., Ltd.	Brantford, Ont.
C. F. Wheaton	Dodge Mfg. Co., Ltd.	Toronto, Ont.
Logan M. Waterous	The Waterous Engine Works Co., Ltd.	Brantford, Ont.
W. C. Phillips	Frontenac Moulding & Glass Co., Ltd.	Kingston, Ont.
W. M. Gartshore	The McClary Mfg. Co.	London, Ont.
F. S. Corrigan	The Sheet Metal Products Co. of Canada, Ltd.	Toronto, Ont.
T. R. Deacon	Manitoba Bridge & Iron Works Co., Ltd.	Winnipeg, Man.
J. N. Shenstone	Massey-Harris Co., Ltd.	Toronto, Ont.
T. A. Russell	Russell Motor Car Co., Ltd.	Toronto, Ont.
Geo. McLaughlin	McLaughlin Motor Car Co., Ltd.	Oshawa, Ont.
Geo. Henderson	Brandram-Henderson, Ltd.	Montreal, Que.
A. Nieghorn	Nichols Chemical Co., Ltd.	Toronto, Ont.
A. O. Dawson	Canadian Cottons, Ltd.	Montreal, Que.
Michael Hirsch	J. Hirsch & Sons, Ltd.	Montreal, Que.
E. L. Drewry	Ed. L. Drewry, Ltd.	Winnipeg, Man.
Eugene Tarte	La Patrie Publishing Co., Ltd.	Montreal, Que.
T. W. B. London	Balfour, Guthrie & Co., 739 Hastings St. W.	Vancouver, B.C.
W. R. Dunn	International Harvester Co., Ltd.	Hamilton.

Insurance Committee

At the meeting of the Insurance Committee held in the Association's head office, Toronto, on July 31st, the following additional members were elected:

A. H. Whitman	Robin, Jones & Whitman, Ltd.	Halifax, N.S.
C. S. Sutherland	Amherst Boot & Shoe Co., Ltd.	Amherst, N.S.
S. L. Emerson	Emerson & Fisher, Ltd.	St. John, N.B.
F. G. McConnell	L. E. Waterman & Co., Ltd.	Montreal, Que.
R. H. Gillean	Watson, Foster Co., Ltd.	Montreal, Que.
E. Littler	Walter M. Lowney Co. of Canada, Ltd.	Montreal, Que.
L. J. Breithaupt	Briethaupt Leather Co., Ltd.	Kitchener, Ont.
J. C. Notman	McKinnon Dash Co., Ltd.	St. Catharines, Ont
A. W. Hewitt	Consumers' Gas Co. of Toronto	Toronto, Ont.
J. W. Hobbs	Consolidated Plate Glass Co., Ltd.	Toronto, Ont.
G. C. Crean	Robert Crean & Co., Ltd.	Toronto, Ont.
J. C. McCarter	Eclipse Whitewear Co., Ltd.	Toronto, Ont.
R. S. Gourlay	Gourlay, Winter & Leeming, Ltd.	Toronto, Ont.
Wm. Inglis	John Inglis Co., Ltd.	Toronto, Ont.
J. F. M. Stewart	Point Anne Quarries, Ltd.	Winnipeg, Man.
C. W. Furrow	West-Woods, Ltd.	Winnipeg, Man.
A. R. McDiarmid	McDiarmid & Clark	Brandon, Man.
Wm. Martin	Manitoba Gypsum Co., Ltd.	Winnipeg, Man.
C. Meadows	Geo. B. Meadows Co., Ltd.	Toronto, Ont.
T. A. Hollinrake	A. R. Williams Machinery Co., Ltd.	Toronto, Ont.
John T. Ham	Ham & Nott Co., Ltd.	Brantford, Ont.
W. H. Scott	Livingston & Scott	Toronto, Ont.

Membership Committee

The following were elected to the Membership Committee at the regular meeting of that Committee held in the head office of the Association on July 29th:—

Angus McLean	Bathurst Lumber Co., Ltd.	Bathurst, N.B.
Geo. W. Helliar	Brandram-Henderson, Ltd.	Halifax, N.S.
Alex. Wilson	Wilson Box Co., Ltd.	St. John, N.B.
R. H. Williams	Roberts, Simpson & Co.	Halifax, N.S.
H. MacLaren	Alaska, B.C., Bedding Co.	Vancouver, B.C.
McTaggart Cowan	Sterling Glove Co.	Vancouver, B.C.
W. H. Syer	R. M. Moore & Co., Ltd.	Vancouver, B.C.
J. B. Thompson	Jas. Thompson & Sons, Ltd.	Vancouver, B.C.
J. M. Thompson	Beatty Bros., Ltd.	Winnipeg, Man.
C. F. Roland, Jr.	Coca-Cola Co., Ltd.	Winnipeg, Man.
J. D. Windrum	Mayer Co., Ltd.	Winnipeg, Man.
F. M. Beatty	Midland Woodworkers, Ltd.	Midland, Ont.
Wm. Innis	P. Burns Co., Ltd.	Calgary, Alta.
F. W. Stewart	Cluett, Peabody & Co.	Montreal, Que.
A. A. Bittues	Gillette Safety Razor Co.	Montreal, Que.
P. E. Joubert	Lamontagne, Ltd.	Montreal, Que.
W. C. Coulter	Booth-Coulter Copper & Brass Co., Ltd.	Toronto, Ont.
C. Meadows	Geo. B. Meadows Co., Ltd.	Toronto, Ont.
Geo. Brigden	Brigden's, Ltd.	Toronto, Ont.
J. S. McKinnon	S. F. McKinnon & Co., Ltd.	Toronto, Ont.
C. B. Watts	Dominion Millers' Association	Toronto, Ont.
J. M. Sinclair	Eureka Mineral Wool & Asbestos Co.	Toronto, Ont.
A. E. Hatch	Canada Steel Goods Co., Ltd.	Hamilton, Ont.
C. A. Murton	Canada Ready Print Co.	Hamilton, Ont.
C. R. McCullough	Ontario Engraving Co., Ltd.	Hamilton, Ont.
H. Winfield	Young-Winfield, Ltd.	Hamilton, Ont.
J. J. Gibbons	J. J. Gibbons, Ltd.	Toronto, Ont.

Industrial Relations Committee

The following new members were added to the Industrial Relations Committee at a meeting of the Committee held in the head office of the Association on July 30th:—

J. A. McDonald	Amherst Pianos, Ltd.	Amherst, N.S.
J. A. Marven	J. A. Marven, Ltd.	Moncton, N.B.
A. G. Robb	Robb Engineering Works, Ltd.	Amherst, N.S.
G. H. Duggan	Dominion Bridge Co., Ltd.	Montreal, Que.
H. Williams	Canadian Vickers, Ltd.	Montreal, Que.
W. A. Black	Ogilvie Flour Mills Co., Ltd.	Montreal, Que.
C. G. Robson	W. H. Clark & Co., Ltd.	Edmonton, Alta.

Organization Ready but Industry Lacking

A large Canadian manufacturing concern of high standing finds itself in rather a peculiar position, according to information received by INDUSTRIAL CANADA. It is unable to expand its own line of business any farther and, in order to keep its organization intact, is anxious to become connected with some other concern making a different product, in which it could invest capital and utilize its present efficient organization in expanding business. Any firms which might be interested in discussing this proposition are invited to write to the editor, stating the line of manufacture in which they are engaged.

E. Parnell	Spiers, Parnell Baking Co., Ltd.	Winnipeg, Man.
L. R. Barrett	Vulcan Iron Works, Ltd.	Winnipeg, Man.
H. B. Lyall	Manitoba Bridge & Iron Works, Ltd.	Winnipeg, Man.
J. E. Davies	Alberta Foundry & Machine Co.	Medicine Hat, Alta.
C. M. Thompson	Brantford Roofing Co., Ltd.	Brantford, Ont.
M. R. Meldrum	Herbert Morris Crane & Hoist Co., Ltd.	Niagara Falls, Ont.
H. Bertram	John Bertram & Sons Co., Ltd.	Dundas, Ont.
F. R. Lalor	Monarch Knitting Co.	Dunville, Ont.
W. R. Breyfogle	De Laval Co., Ltd.	Peterboro', Ont.
H. J. Waddie	Canadian Drawn Steel Co., Ltd.	Hamilton, Ont.
J. M. Taylor	Taylor Forbes Co., Ltd.	Guelph, Ont.
S. J. Williams	Williams, Green & Rome Co., Ltd.	Kitchener, Ont.
W. M. Gartshore	McClary Mfg. Co.	London, Ont.
Geo. E. Peacock	Tudhope-Anderson Co., Ltd.	Orillia, Ont.
H. I. Thomas	J. R. Booth	Ottawa, Ont.
Geo. Pattinson	Geo. Pattinson & Co.	Preston, Ont.
C. O. Stillman	Imperial Oil Co., Ltd.	Sarnia, Ont.
C. Howard Smith	Howard Smith Paper Mills, Ltd.	Montreal, Que.
Wm. Rutherford	Wm. Rutherford & Sons Co., Ltd.	Montreal, Que.
Geo. D. MacKinnon	MacKinnon Steel Co., Ltd.	Sherbrooke, Que.
J. A. Northway	John Northway & Son, Ltd.	Toronto, Ont.
A. C. Rogers	Canada Cloak Co.	Toronto, Ont.
F. P. Jones	Canada Cement Co., Ltd.	Montreal, Que.
W. J. Bulman	Bulman Bros., Ltd.	Winnipeg, Man.
Frank Whitton	Steel Co. of Canada, Ltd.	Hamilton, Ont.
Ross H. McMaster	Steel Co. of Canada, Ltd.	Montreal, Que.
J. A. Coulter	John Morrow Screw & Nut Co., Ltd.	Ingersoll, Ont.
R. S. McLaughlin	McLaughlin Motor Co., Ltd.	Oshawa, Ont.
G. M. McGregor	Ford Motor Co., Ltd.	Windsor, Ont.
C. H. Waterous	Waterous Engine Works, Ltd.	Brantford, Ont.
Mr. Grant	International Harvester Co., Ltd.	Hamilton, Ont.
Geo. Wedley	Cockshutt Plow Co., Ltd.	Hamilton, Ont.
A. F. Hatch	Canada Steel Goods Co., Ltd.	Hamilton, Ont.
Wm. Inglis	John Inglis Co., Ltd.	Toronto, Ont.

The principal subjects considered by the Committee were the arrangements for the National Industrial Conference which has been called by the Government for September 11th, in Ottawa.

Resolutions Presented to the Government

An important innovation was made this year in connection with the presentation to the Government at Ottawa of the resolutions adopted at the annual meeting of the Association. Heretofore, it has usually been the custom to mail copies of the resolutions to the various ministers. This year, however, an influential delegation of officers and members of the Association proceeded to the capital, presented the resolutions and spoke in their support.

The delegation which went to Ottawa on August 5th was received by the Premier, Sir Robert Borden; Sir George Foster, Minister of Trade and Commerce, and Sir Henry Drayton, the new Minister of Finance. After the members of the delegation had been introduced by Mr. G. M. Murray, who had arranged the interview, Mr. J. E. Walsh, general manager, formally presented the resolutions, which had been specially printed in attractive form for the occasion. He was followed by the President, Mr. T. P. Howard, who spoke briefly on the resolutions as a whole. Special attention was then devoted to the resolution urging the appointment of a Tariff Board by Mr. E. G. Henderson, Windsor, and Mr. G. C. Coppley, Hamilton. Mr. G. H. Douglas, Hamilton, spoke on the resolution with respect

to the Imperial Preferential Tariffs. A favorable hearing was given by the Ministers and replies were made by the Premier and Sir George Foster, who assured the delegation of their interest and promised careful consideration of the resolutions presented.

The following comprised the delegation:—

T. P. Howard (Pres.)	Phœnix Bridge & Iron Works, Ltd.	Montreal.
G. C. Coppley	Coppley, Noyes & Randall, Ltd.	Hamilton.
F. C. Daniels	Dominion Textile Co.	Montreal.
G. H. Douglas	Thornton & Douglas	Hamilton.
C. V. Harding	Toronto Carpet Mfg. Co., Ltd.	Toronto.
S. Harris	Harris Litho. Co., Ltd.	Toronto.
A. F. Hatch	Canada Steel Goods Co., Ltd.	Hamilton.
E. G. Henderson	Canadian Salt Co., Ltd.	Windsor.
T. A. Hollinrake	A. R. Williams Machinery Co., Ltd.	Toronto.
P. E. Joubert	Lamontague, Limited	Montreal.
L. L. McMurray	Gutta Percha & Rubber Mfg. Co., Ltd.	Toronto.
G. M. Murray	C. M. A.	Ottawa.
Joseph Picard	Rock City Tobacco Co., Ltd.	Quebec.
George A. Slater	George A. Slater Limited	Montreal.
C. Howard Smith	Howard Smith Paper Mills, Ltd.	Montreal.
F. W. Stewart	Cluett, Peabody & Co.	Montreal.
H. J. Thomas	J. R. Booth Co.	Ottawa.
J. E. Walsh	C. M. A.	Toronto.
Geo. W. Watts	Canadian General Electric Co., Ltd.	Toronto.
A. W. White	Geo. White & Sons Co., Ltd.	London.

Company Test Cases

It is announced that the Judicial Committee of the Privy Council upon application has granted leave to appeal against the decision of the Supreme Court of Canada, in favor of the provinces, requiring companies operating under Dominion charters to become licensed under Provincial acts, before carrying on business in the different provinces.

The actions in Saskatchewan and Manitoba were brought with the concurrence of the Provincial authorities by way of testing the validity of the acts and were carried to the Supreme Court of Canada. A similar action was brought in Ontario but it was not carried farther than the Appellate Division of the Supreme Court of Ontario.

The cases now on appeal to the Judicial Committee of the Privy Council, which are being carried at the Dominion Government's instance, will be consolidated as one, so that there is every reason to believe the vexed question at issue will shortly be determined in a comprehensive and definite manner.

The question of the validity of the provincial acts requiring Dominion companies to become licensed being sub-judice, all claims by the provinces should be suspended pending the judgment of the Privy Council.

Royal Ontario Museum

As the result of a joint movement recently inaugurated by a joint committee of the Toronto Branch of the C.M.A., the Toronto Board of Trade and the co-operation of other representative local associations, the Royal Ontario Museum, Toronto, is now open to the public on Sundays, free of charge, from two to five p.m. The educational value of the museum and the desirability of the industrial workers having access to it on Sunday afternoons, with the necessary quiet and leisure, will undoubtedly have a beneficial effect. Manufacturers would do well to encourage their employees to study the many exhibits showing the progress of the industries to be found there.

Trade with Germany and Austria

Food supplies may now be exported from Canada to German and to certain portions of Austria. For export it is necessary to secure a license from the Canadian Trade Commission, stating description, quantity, value and destination of the shipment and giving the name of the consignee. The export license must be presented to Customs. The Canadian Trade Commission will consider telegraphed applications for export licenses.

Activities of the Prairie Provinces Division

By G. E. CARPENTER
Secretary, Prairie Provinces, Division, C.M.A.

AN invitation has been extended by the Hon. Chas. Stewart, Premier of Alberta, on behalf of the Alberta Government, to the members of the division to attend the Industrial Congress and Provincial Tour to be held in Alberta from August 11th to 16th. The Congress will place before its visitors data in relation to the natural resources and industries of Alberta and the Canadian West, with the object that serious consideration may be given the economic development of the trade of the Dominion, the extension of markets, Oriental and Pacific trade routes, and generally the whole phase of the western era now dawning. The addresses will be given by men of international reputation in commerce, industry and transportation.

The delegates will assemble at Medicine Hat on August 11th, and will be conveyed by special train to Lethbridge the following day, thence to Calgary, where the two days' session of the Industrial Congress will be held on August 13th and 14th, after which the journey will be continued to Edmonton, the capital city of the province, where the delegates will be entertained by the Government and City during Friday and Saturday. That night the train will leave for Banff, arriving there Sunday morning. The delegates can then continue their trip through the Rocky Mountains or in such direction as they may desire.

For reasons that you will readily appreciate it is very desirable that anything that will tend to increase manufacturing in Western Canada should receive the hearty support of members of this division. In addition to this, the tour will provide splendid means for each member to visit their correspondents in the Province of Alberta, and it is hoped that a large number will try and attend the Congress.

Labor Situation

The general labor situation in Winnipeg has been much disturbed during the past month, as was to be expected following the general six weeks' strike, ending June 26th, and as an effort was made by the strike committee to call out workers in other cities in the Prairie Provinces in sympathy with the Winnipeg workers a short review of the situation is given below for the information of members of the division. In the first place the protracted tie-up in Winnipeg resulted in much business, which ordinarily would have been placed with Winnipeg manufacturers being ordered from other sources of supply, so that when the general strike was called off employers were not in a position to furnish work for as many men as they had on their pay rolls at the time the general strike was called. Then too, they were faced with the fact that even before the general strike was declared off many employers had resumed operations, and they could not see their way to discharge employees who had been taken on during the strike to make room for workers who had thrown

up their employment without notice and in most cases where no grievance existed with their employers. These two factors resulted in several hundred men being left without employment when the general strike was declared off. Unless immediate steps are taken by civic, provincial and Dominion Governments to furnish work for a large number of men, there is a grave possibility that there will be severe suffering in the city this coming winter. This is a condition which must be realized by these bodies, and it is hoped that they will take adequate steps without delay.

Investigation of Causes of Strike

The Royal Commission appointed by the Manitoba Government at the request of the Trades and Labor Council of Winnipeg, upon the general strike being declared off, to investigate the causes of the strike and make recommendations, has held numerous sessions. The representatives of the Trades and Labor Council in the first place appeared to confine their efforts before this commission to showing that discrimination was practised by employers against certain strikers, and to secure a remedy for this. However, Judge Robson took the position that before this matter could be considered, those responsible for calling the strike would have to show that their skirts were clean. The representatives of the Trade and Labor Council at first declined to go ahead with this feature of investigation, inasmuch as certain of the strike leaders are on trial for conspiracy to incite sedition. Therefore, the proceedings of the Commission were adjourned for a few days. However, they have now been resumed, and Mr. Winning, President of the Trade and Labor Council stated to the Commission that,—

"Labor was very much dissatisfied with conditions as they existed. The causes of this were: unemployment, high cost of living, profiteering, the refusal on part of some of the employers to recognize collective bargaining, and the right of the workers to organize, the lack of action on the part of the Government, and poor working conditions."

Mr. Winning omitted to state that when the Manitoba Government enacted the Industrial Disputes Bill for the purpose of investigating and dealing with most of these subjects, organized labor refused to have anything to do with the Bill, its representatives telling the Government publicly that it would have nothing to do with any Board such as the bill authorized, which recognized the rights of capital in industry as at present organized. Consequently when the bill was passed the Trades and Labor Council refused to nominate any of its members to the Board, although invited so to do by the Manitoba Government.

The preliminary trial before the magistrate of the strike leaders charged with conspiracy to incite sedition is proceeding. The evidence being brought out by Government Counsel, according to newspaper reports, appears to connect up the strike leaders with the One Big Union Convention at Calgary, which openly advocated Soviet Government in Canada, and the seizure of plants by the workers. The evidence also goes to show that the strike committee endeavored to control many activities of the citizens; further, that the strikers committee controlled the city for a portion of the strike at least; Mayor Gray's testimony on this point being very emphatic.

Royal Commission on Industrial Relations

Every member of the Division has been furnished with the copy of the report of the Royal Commission on Industrial Relations, appointed by the Dominion Government to inquire into industrial relations in Canada. When this was received a general meeting of members was held on July 12th, when a special committee of the Division was appointed to study the report carefully and make recommendations to a general meeting of members to be held at a future date.

In the meantime the Dominion Government has decided to call a joint conference of employers and employees in Ottawa on Sept. 11th, and this association has been asked to appoint twenty-five delegates. The division has suggested the names of several large employers throughout this territory to the Head Office. It is expected that the twenty-five will be appointed at an early date, in order that they may study the matter thoroughly before the Conference held in Ottawa. In the meantime the committee of Winnipeg employers is giving the matter careful consideration. Every branch of the division will be kept informed of what is being done, and their views upon the important matter of industrial relations will be welcomed by the Winnipeg Branch of the division.

Taxation of Property Outside Province

By H. MACDONALD
Secretary, Legal Department, C.M.A.

IN connection with attempts being made by various provinces from time to time to tax property situate outside the taxing province, the validity of which our Legal Department has uniformly disputed, an interesting decision on the subject is announced.

On June 28th the Quebec Court of Appeal rendered an important decision to the effect that any attempt to levy tax on property locally situate outside the province is not "taxation within the province," and is beyond the competence of a provincial legislature. The case was Barthe *et al.* vs. Alleyn, on appeal from the Superior Court. Barthe is the collector of the successions tax in Quebec, and he claimed, through the court, a certain tax on property that was owned by the heirs of the late Hon. John Sharples, in the Province of Ontario. This claim was contested on the ground that Quebec could not impose taxes on property owned in other provinces, but the decision of the Superior Court was in favor of the province.

The decision of the Court of Appeal, reversing that of the Superior Court, is based on the consideration "that the taxation of transmissions within the province of property locally situate outside the province is an attempt to do indirectly that which the legislature is forbidden to do directly, and is in effect taxation of property not within the province."

Thus judicial opinion is clearly to the effect that the taxing powers of the provinces must be limited to their respective jurisdictions.

The "Canadian" Tractor

Alberta Foundry and Machine Co., Limited are now Manufacturing this Machine in Medicine Hat

In the June issue of INDUSTRIAL CANADA, an item dealing with the manufacture of tractors in Medicine Hat, taken from an article appearing in the Calgary *Herald*, was published. This article stated that "The Alberta Foundry will not be ready to produce their 'Canadian' tractor for awhile." This was not correct, as the Alberta Foundry have already produced and satisfactorily tested out their first tractor, and are now manufacturing the same.

Canada's New Bankruptcy Act Explained

The More Important Features are Outlined and Certain Provisions which will be New to Some of the Provinces are Pointed Out—Facilities Provided by the Act Will be Increasingly Appreciated

By H. MACDONALD
Secretary, Legal Department, C.M.A.

AFTER discussion in the Canadian Parliament during two sessions and preliminary preparations extending over several years, a Federal Bankruptcy Act was passed in the 1919 session, which may be regarded as a factor in the re-adjustment incidental to the war. During the course of the Bill, our Legal Department, through our Ottawa office, kept in close touch with the Government and with other public bodies upon the subject, with a view to safeguarding the interests of manufacturers, and we are glad to state that we were able to introduce very important amendments which are incorporated in the Act and which will contribute to the greater protection of creditors, in line with the legislation of other countries.

Deposit Unclaimed Dividends

Amongst these amendments we particularly urged the adoption of provisions for proper accounting by and discharge of trustees in bankruptcy, and procured the enactment of effective clauses providing that unclaimed dividends shall be deposited by the trustee with the Minister of Finance, to be afterwards available to creditors entitled thereto, with accrued interest thereon.

The more important features of the Act are as follows:—

First, it introduces uniformity in the legislation of Canada, something which has been needed for many years. The old assignment acts of the various provinces will become non-effective as soon as the Governor-General has proclaimed the new Act. This will be done when the general rules, which are now being drafted, are completed, which will be sometime about November.

Second, it provides that a creditor or several creditors together, knowing a debtor to be insolvent and unable to collect his account, and having a claim of $500, may apply to the courts to have the debtor adjudged a bankrupt. The whole circumstances of the case will be passed upon by a judge of such as have been constituted by the Act, courts of bankruptcy to carry out the provisions of the Act. The court may dismiss the petition of the creditor, may stay the proceedings, or may grant an order, as the circumstances warrant. In the past, when a recalcitrant debtor has refused to make an assignment under the assignments acts, the only course the creditor had was to issue a writ, obtain judgment and issue execution; the result was that every creditor had to follow suit in order to protect his interest and the unfortunate debtor was loaded down with costs, the estate being distributed by the sheriff *pro rata* to those creditors only who had taken action.

Third, the act provides for the discharge of an honest debtor who has turned over his assets for the benefit of his creditors, relieving him from a load of debt that he has been unable to pay. The Act provides that a debtor may make application to the court for a discharge from his liabilities; all persons interested in the case may appear before such court, and after hearing all the evidence, the judge will decide whether the debtor shall receive his discharge, power being vested in the court to refuse the discharge absolutely, or it may suspend for a time the discharge, or it may grant a conditional discharge, say, until the debtor has paid fifty cents on the dollar, or by requiring the debtor to consent to judgment being entered against him for any balance owing at the date of the discharge, such balance to be paid out of future earnings or after acquired property. Some of the things that will militate against a debtor obtaining his discharge, are that his assets at the date of the assignment were not of a value equalling fifty cents on the dollar of the unsecured liabilities; that the debtor has omitted to keep proper books of account; that the debtor continued to trade after knowing he was insolvent; that the debtor has failed to account satisfactorily for loss of assets or deficiency of assets to meet his liabilities, or has brought on his bankruptcy by speculation or by unjustifiable extravagance in living or by gambling or by culpable neglect of business; that the bankrupt within three months of the assignment has given an undue preference to any of the creditors, or that he has been bankrupt before, or has been guilty of fraud, or fraudulent breach of trust. There will be no difficulty for an honest debtor who has turned over all of his assets to his creditors, to obtain his discharge; the Act is framed to protect such a debtor and to penalize the fraudulent one.

New Features

In addition to the three outstanding features enumerated above, there are a number of provisions that will be new to some of the provinces, such as:—

(*a*) Provision for ratifying compositions and compelling minority creditors to accept the ruling of the majority, the clause providing that a composition shall be binding when accepted at a meeting whether the majority in number of creditors who hold two-thirds of the amount of the proved debts resolve to accept the proposition, providing the same is approved by the court.

(*b*) Trustees in future shall be known as "authorized trustees," and shall be appointed by the Governor-General-in Council. All authorized trustees must provide general bonds before acting as such and in addition shall provide special bonds in each estate unless relieved by vote of the creditors. The creditors may remove a trustee and substitute another.

(*c*) A debtor who has made an assignment shall be known as "an assignor"; a debtor who has been forced into bankruptcy by his creditors shall be known as "a bankrupt."

(*d*) Trustees shall have power to sell patented articles without being bound by any restrictions such as may apply to ordinary traders.

(*e*) A trustee may carry on the business of a debtor so far as may be necessary for the beneficial winding-up of the estate and may incur obligations and make advances for such purposes.

(*f*) No trustee shall deposit any sums received by him as trustee into his private banking account.

(*g*) All settlements made by debtors within one year previous to an assignment, except in good faith and for valuable consideration, shall be void as against the trustee, and shall be void within five years previous to such assignment, unless it can be shown that debtor was able to pay his debts in full without aid of the property assigned.

(*h*) All marriage contracts for the future payment of money to the wife, or husband, or children of the debtor, where the debtor had not at the date of the marriage any estate or interest in the property assigned shall be postponed until all claims of other creditors have been satisfied unless the contract has been executed previous to the assignment and even if

executed shall be void, if the payment or transfer were made within six months of the assignment.

(*i*) Assignments of book debts unless registered in accordance with provincial statute shall be void as against trustee.

(*j*) Fraudulent preferences given within three months preceding an assignment may be set aside.

(*k*) Banks must notify the trustee of the existence of any balances standing to the credit of the debtor.

(*l*) The Bankruptcy Act shall apply to insolvent corporations; these have hitherto been wound up under the Winding-Up Act.

(*m*) Trustees must pay dividends promptly, not later than six months and earlier if required by the inspectors and must declare a dividend when sufficient money is on hand to pay ten per cent.

(*n*) Unclaimed dividends shall be deposited with the Minister of Finance.

(*o*) The remuneration of trustees is limited to five per cent. of the cash receipts.

(*p*) Inspectors' fees are done away with, only their out-of-pocket expenses being allowed.

(*q*) Unliquidated damages arising otherwise than by reason of a contract, promise or breach of trust shall not be provable.

(*r*) Secured creditors, in cases where the trustee elects to take over the security at the valuation placed upon it by the creditors, shall not be entitled, as heretofore, to an extra ten per cent.

(*s*) Claims by husband or wife for wages, money or other property lent to the debtor, shall not be entitled to claim upon the estate until all of the creditors have been paid in full.

(*t*) Claims for wages, exceeding three months, by father, son, daughter, mother, brother, sister, uncle or aunt shall not be allowed until all other claims have been paid.

(*u*) No officer, director, or shareholder of an insolvent corporation shall be entitled to claim for wages exceeding three months until all other claims have been paid.

(*v*) Rent is now preferred all over Canada only in an amount not exceeding the value of the distrainable assets and not exceeding three months accrued due prior to the assignment plus the cost of distress—if any.

(*w*) Accelerated rent under leases shall rank upon the estate as an ordinary creditor, but not more than for three months.

(*x*) Trustees may retain the lease or may disclaim same and may assign the lease or sublet the premises for the unexpired term.

(*y*) The debtor must attend the first meeting of his creditors for the purposes of examination and giving information.

(*z*) The debtor must give an inventory of his property, a list of his creditors and his debtors and do everything to assist the trustee in winding-up the estate. If the debtor fails to perform the duties thus imposed upon him he shall be guilty of contempt of court and may be punished accordingly.

(*aa*) Barristers, solicitors, or advocates of any court in any province may practise in the bankruptcy courts in any or all of the provinces.

(*bb*) An undischarged bankrupt may not obtain credit to the extent of $50 or upwards from any person without informing that person that he is an undischarged bankrupt, under penalty of a fine not exceeding $500, or one year's imprisonment or both, or if he enters into any business under a name other than that of which he was adjudicated a bankrupt without making such disclosure.

(*cc*) If a person having been adjudged a bankrupt and re-entering business fails to keep proper books of account, he shall be liable to a fine of $1,000 and to one year's imprisonment.

(*dd*) Proper books of account are defined for the first time as such books of account as are necessary to exhibit or explain the transactions and financial position of a trade or business, including a book containing entries from day to day in sufficient detail of all cash received and paid, as well as an account of all goods sold and purchased and statements of annual and other stocktaking.

(*ee*) A creditor who maliciously endeavors to force a debtor into bankruptcy shall be liable to a fine of $1,000, or two year's imprisonment, or both.

The Act applies to all corporations with the exception of banks, railways, trust and insurance companies and to all persons except farmers and wage-earners, earning less than $1,500 a year.

A Unique Exhibition Held at Kitchener

By ALEX. MARSHALL
Manager, Commercial Intelligence Department, C.M.A.

THE city of Kitchener has once more distinguished itself for enterprise and initiative. During the week of July 21-26 the famous arena where the big hockey games are pulled off was occupied by an exhibition that was unique for Canada.

Among the decorated booths one could find everything connected with the shoe and leather trade from sole leather and machinery to the finest dressing for white kid shoes. As for the shoes themselves, it would be an odd sort of human being who could not be satisfied. From the tiniest of baby shoes to the big 16-in. prospectors' boots, felt-lined lumbermen's boots and rubber hip boots, every class or kind was represented. In fact, if any adverse criticism is to be made it is that some of the exhibitors had too many lines. However, they all went to make a fully representative show.

Not only was the showing of leathers, shoes, machinery and findings good, but information about any subject connected with the business from hides up could be had for the asking from the numerous authorities present at the show. When to all this array of talent was added the wholesalers and retailers who had special days set apart, it would be difficult to imagine a more complete and representative gathering of the whole trade than occurred on occasions during the week. Important results are bound to follow from this first attempt at getting all parts of the shoe industry together, both socially and in a business way.

Strong emphasis was laid on the social side of the affair. All kinds of people could be seen chatting in groups and exchanging viewpoints. This part was well looked after officially, too, for on Tuesday night, the exhibitors and their friends were the guests of the Lang Tanning Company at a banquet where there was "a feast of reason and a flow of soul," and other things. On Wednesday, the retailers from all over the Dominion who had met in their first annual convention in Toronto on the two previous days were the guests of the exhibition authorities. In the evening everybody connected with the exhibition, guests, retailers, wholesalers, manufacturers and exhibitors were carried off to Bridgeport in a fleet of motors and there entertained to a buffet luncheon by the Breithaupt Leather Co.

At both these functions the representatives of the different parts of the trade exchanged greetings and "jollied" one another along. Such representative men as G. H. Rieder, Ames, Holden, McCready, Ltd.; P. A. Doig, Tetrault Shoe Mfg. Co.; A. R. Kaufman, Kaufman Rubber Co.; Geo. Lang, Lang Tanning Co.; L. J. & L. O. Breithaupt, Breithaupt Leather Co.; L. S. Scott, Getty & Scott, Ltd., president, Shoe Manufacturers Association of Canada; G. W. McFarland, Williams Shoe, Ltd., Chairman, Ontario Shoe Manufacturers Association; Warren T. Legan, President, National Shoe Retailers Association; N. M. Davison, Canadian Consolidated Felt Co., Ltd., took part in the speech-making.

There was also a never-failing orchestra which produced a fine line of jazzy tunes and when the occasion demanded it, led the assembled shoe men in popular songs.

The organizers of this enterprise deserve great credit for their energy and resource and much praise has been voiced to Mr. Chas. A. Ahrens, of Chas. A. Ahrens, Ltd., President of the Exhibition, and his numerous committees for the success that attended their efforts. They certainly proved that Canada is finding her own feet commercially and their effort is well worthy of emulation.

Activities of the Reconstruction Association

Work Being Extended to British Columbia—What the Western Committee has Accomplished—Investigation Department Reports on Retail Prices in Canada and United States—Much Useful Publicity Work Being Done

By SIR JOHN WILLISON
President, Canadian Reconstruction Association

INITIAL plans for the organization of a British Columbia branch of the Canadian Reconstruction Association have been completed by the Western Committee and approved by the General Executive. The Western Committee has further strengthened its position throughout the Prairie Provinces, and many new members are reported. In the course of a special organization trip, Mr. Charles F. Roland, Secretary of the Western Office, visited Brandon, Regina, Moose Jaw, Medicine Hat, Calgary, Vancouver, and Victoria, seeing prominent men in the various centres and receiving gratifying assurances of support. As a result of conferences in Vancouver, it was decided not to create a separate British Columbia committee, but to recommend extension of the Western Office to include that province, while appointing an assistant secretary to deal with British Columbia questions. It was further recommended that the British Columbia branch should appoint three members to the Western Committee, one of them to be represented on the Executive Board of the Association. Mr. Roland's full report came before the Executive at its last meeting in Montreal, and was fully approved.

In a special report on the work of the Western Committee Mr. Roland presents the following outline of some of his chief activities:

Thirty-two Western Boards of Trade and municipalities have passed resolutions endorsing the aims and objects of the Canadian Reconstruction Association.

A series of circulars and bulletins, dealing with Western problems and general reconstruction activities, have been published fortnightly, and over 28,000 publications of this nature have been distributed since January 1.

The Western Secretary has held many conferences and meetings with groups of business men interested in the development of particular industries, such as the potato flour industry, hemp industry, Kaolin clay and pottery industry, utilization of flax straw, etc.

Work of Western Committee

The Committee has urged the necessity for greater production in field and factory. It has been active in supporting Federal and Provincial housing plans. It has consistently urged scientific utilization of natural resources, the establishment of better relations between capital and labor, and development of the home market and purchase of Made-in-Canada products. It was influential in securing legislation from the Alberta and Manitoba Governments for the establishment of Departments of Industry in those provinces. Through the representation of its individual members at conferences and on delegations before the Manitoba Cabinet, it was further instrumental in securing the passage of the "Industrial Conditions Act," and representatives of the Western Committee were appointed on the Commission. It has carried out considerable investigation work, more particularly on the tariff question, and has reproduced and distributed thousands of circulars on this subject prepared by the head office. It has warmly supported the movement for a proposed national conference on moral education, to be held in Winnipeg next October. It has endeavored, through conferences with representative organizations, clubs, and societies, to promote a better understanding between agricultural and industrial interests in the West. It has issued a regular weekly press service to daily and weekly newspapers. Finally, it has been active in support of the proposed Alberta Industrial Conference this month.

Among the outstanding general activities of the Association have been its Made in Canada and anti-Bolshevist campaigns. Reference to both of these have been made in previous issues of INDUSTRIAL CANADA. It is gratifying to be able to report that the demand from manufacturers for the Association's Made in Canada insert cards has been so extensive that already 2,500,000 are in circulation, while the first edition of 250,000 leaflets, containing a summary of the Overman Committee's Report on German Propaganda and Bolshevism in the United States, has been exhausted.

Motion Pictures Being Shown

Three of the initial six motion picture films produced by the Association to illustrate the national advantages of industrial development, are now being shown and the remainder will be produced shortly. The motion pictures already produced include the pulp and paper, iron and steel, and woollen industries. Two other films will be shown shortly, dealing with the grain and milling industry and the agricultural machinery industry.

In view of the necessity for the development of domestic and foreign trade, important enquiries are being conducted by the Investigation Department into comparative retail selling prices of manufactured articles in Canada and the United States, and the problem of providing Canadian credit for foreign purchases in the Dominion. While the Department has not yet completed its examination of comparative Canadian and American prices, it has submitted an interim report containing the following important conclusions:

1. Canadian retail selling prices of manufactured commodities in most cases are substantially lower than retail selling prices in the United States, plus the Canadian import duty.

2. Many commodities manufactured in Canada and protected by a tariff on imports are sold to the Canadian consumer at prices as low, and not infrequently lower, than retail selling prices in the United States of comparable commodities, even without considering the duty.

With regard to foreign trade, Canada this year will have to provide European credits aggregating approximately $500,000,000 if our exports are to be maintained at the same level as during the war. The Dominion Government has already extended credits of $25,000,000 each to Roumania, Greece, and Belgium, and a credit of up to $50,000,000 to the British Government for the purpose of buying timber in Canada. In addition, a Canadian Government credit has been offered to France. The foreign business which has been obtained for Canada against these credits is to-day contributing in no small measure to the maintenance of Canadian prosperity and the continued operation at full capacity of certain Cana-

dian industries. If, however, Canada is to take advantage of the almost unlimited foreign trade opportunities which are offering at the present time, very large additional credits must be provided, and the Government has clearly indicated its view that the responsibility for providing further industrial credits should now be assumed by the business and financial interests of the country.

In Canada, as in the United States, the question of providing credits for foreign purchases appears to be largely an investment problem. A solution is difficult under present conditions, because of the financial needs of the Federal, Provincial, and Municipal Governments. Substantial progress has, however, been made in the United States and the subject is receiving serious study in Canada. The Investigation Department is engaged in the preparation of a leaflet analyzing the problem and reviewing what is being done in the United States.

A series of leaflets relative to specific Canadian industries is also under preparation by the Investigation Department. These will contain an analysis of the importance of such industries in Canadian national development; information relative to cost of production in Canada and the cost of producing comparable commodities in other countries; a comparison of prices in Canada and elsewhere, and a study of the effect of the tariff in relation to such prices. It is the hope of the Association that these leaflets may help to remove certain misunderstandings in connection with Canadian industrial development. The first in the series will deal with the agricultural implement industry and the second with the woollen industry.

New British Regulations

Copy of an Important Memorandum Respecting Marks on Goods Imported for Home Use

THE following memorandum is an official statement issued by the British Department of Customs, explaining the use of various marks placed on goods going into Great Britain. The statement outlines clearly what may and may not be done with regard to the use of trade and other marks. Canadian manufacturers who are doing business in the British Isles will be well repaid by a study of these provisions which cover almost every conceivable method of marking.

1. Foreign goods imported in the United Kingdom which do not bear any marks whatever, either on the goods themselves or on the packages or wrappers containing them, are not required to bear any qualifying statement or indication such as "Made abroad," "Made in Japan," etc.

2. Foreign manufactured goods bearing a name or trade mark, being or purporting to be, the name or trade mark of a manufacturer, dealer or trader, in the United Kingdom, must have that name or trade mark accompanied by a definite indication of the country or origin of the goods. The name of the country is a sufficient indication, without the words "Made in," if a name or trade mark only appears, *e.g.*, "John Smith, Holland," would be satisfactory. If such a mark as "John Smith, Sheffield," is used then the qualification must be "Made in Holland, or similar wording.

3. If foreign imported goods bear the name of a place identical with, or a colorable imitation of, the name of a place in the United Kingdom, the name should be accompanied by the name of the country in which the place is situated. Thus Boston, in Massachusetts, should be accompanied by the name "United States," or by the initials, "U.S.A."

4. If a trade description includes the name of a place, and the goods on which it appears are not the produce of that place, or of the country in which it is situated, the trade description must be accompanied by a statement indicating the actual country of production. For instance, a wine, the product of California, and described as "Sherry" (which word is derived from the name of the place Xeres), should have that description accompanied by the statement "Produced in California," or should be described as "California Sherry." An exception to this rule is made in cases where the name of a place in a trade description is indicative merely of the character of the goods, and is not calculated to mislead as to the country of origin. Thus such a description as "Brussels Carpet," or "Portland Cement," need not be accompanied by a statement of the country of actual production, unless as required under paragraph 2 above.

5. Trade descriptions in the English language applied to foreign goods imported for use from non-English-speaking countries are not regarded as indirect indications that the goods are of British or Irish origin, unless the officers have good ground for considering that such trade descriptions are specially designed to convey and do in fact convey, an impression of British or Irish origin for the goods.

Trade descriptions on imported goods in a foreign language which is not that of the country from which the goods are imported must be accompanied by a statement of the actual country of production of the goods, *e.g.*, "Made in Portugal."

6. As regards watches, any mark on the case is deemed to extend to the watch. If, therefore, a watch case is made in this country, and bears any statement or indication of such origin (as, for instance, a British assay mark), and the watch itself is made in Switzerland, then there must appear either

(*a*) in close proximity to the assay mark a conspicuous statement that the watch is of foreign make; or
(*b*) on the dial and also on the top or bottom plate of the movement, visible between the bridges, an indelible statement or indication that the watch is of Swiss origin.

7. All qualifying statements or indications must be distinct in equally conspicuous and indelible characters with, and in close proximity to, the marks they are intended to qualify.

8. Marks on samples or patterns, whether of British or foreign manufacture, are not required to be accompanied by any qualification provided such samples or patterns are valueless in themselves, do not form whole or complete articles, and can be readily distinguished as samples or patterns.



Section of Montreal's Modern Docking Facilities

Plans of Coming British Industries Fairs

These are Held in London, Birmingham and Glasgow, and are in Reality One Fair—They are not Exhibitions but Trades Fairs to which Admittance is Restricted to *bona fide* Trade Buyers who are Seriously Interested in the Participating Trades

(By the British Board of Trade)

THIS the first year of peace releases the British Industries Fair from the restrictions which the manufacture of munitions of war has imposed upon it. The British Industries Fair of 1920 and the fairs of the future will be on a scale commensurate with the magnitude of British industry. The knowledge that the country's first duty was to produce munitions led the Board of Trade to prohibit firms who were mainly engaged in the production of war requirements from exhibiting at trade fairs and practically confined the fairs to a few non-essential trades. The extent to which this policy was carried out is shown by the fact that even such articles as cutlery, electro-plate, clocks and jewellery have been excluded from the last four fairs. But to-day the position is changed, and the contemplated development is able to take place, with the result that it has been found necessary to provide as a home for the fair in London the Crystal Palace, the largest exhibition building in the world. And already there is grave doubt that this building—gigantic as it is—will prove too small unless special additions are made to it.

In Reality One Fair

The three fairs, though held in different towns (London, Birmingham and Glasgow), are in reality one fair. The London fair is directly organized by the Board of Trade, while the fairs in Birmingham and Glasgow are organized by the municipalities of the respective cities under the auspices and with the support of the Board. An important point in the organization of the three fairs is that they are held concurrently, each fair representing a specified group of industries, and no one industry being permitted to exhibit at two fairs.

The surest test of the success of the British Industries Fair during five years that it has now been in existence is the measure of the extent to which it continues to be supported by the exhibitors. Taken year by year, the number of exhibitors in each section or group of trades has steadily increased.

The following is the schedule of exhibits at the three fairs:

London

Organized by the Board of Trade. Address: Director, 10 Basinghall Street, London, E.C.

Cutlery.
Silver and electro-plate.
Jewellery, watches and clocks.
Imitation Jewellery, including hard haberdashery articles.
Glassware of all descriptions.
China and earthenware.
Paper, stationery and stationers' sundries.
Printing.
Fancy goods, including travelling requisites and tobacconists' sundries.
Leather for the fancy goods, bookbinding and upholstery trades.
Brushes.
Toys and sports goods.
Scientific instruments.
Optical goods and spectacle ware.
Photographic appliances and requisites.
Drugs and druggists' sundries.
Musical instruments.
Furniture (knock down for export).
Art needlework requisites.

Birmingham

Organized by the Birmingham Municipality and Chamber of Commerce, with the support and under the auspices of the Board of Trade. Address: Secretary, the Chamber of Commerce, 95 New Street, Birmingham.

Lighting fittings for electricity, gas, oil, etc.
Cooking stoves and utensils, including aluminium, enamelware, etc.
General hardware, including builders', marine and household ironmongery of all descriptions.
Tools (hand) of all descriptions and small machine tools.
Metal furniture for house, shop, office, garden and camp use, including bedsteads.
Perambulators, mailcarts and push-chairs.
Nautical instruments.
Firearms.
Fishing rods and tackle.
Machinery belting of all kinds.
India-rubber goods for industrial and household purposes.
Motor cycles and cycles.
Accessories for motor cars, cycles and aeroplanes.
Weighing and measuring appliances and instruments.
Sanitary appliances.
Paints, colors, and varnishes and painters' requisites.
Tubes in copper, lead, brass and steel, and pipe fittings.
Architectural and ornamental metal work, including gates and fencing.
Ropes of steel and hemp, cordage and string.

Glasgow

Organized by the Corporation of the City of Glasgow, with the support and under the auspices of the Board of Trade. Address: General Manager, Kelvin Hall of Industry, Glasgow.

Textiles of all descriptions.
Readymade clothing, including hosiery.
Hats and caps.
Boots, shoes and gloves.
Carpet and upholstery materials.
Foodstuffs (prepared and preserved) and beverages.
Chemicals (light and heavy).

What the Fairs Have Already Accomplished

The British Industries Fairs are not exhibitions. They are trade fairs to which admittance is restricted to *bona-fide* trade buyers seriously interested in the participating trades, and admission is by invitation only. Participation in the fair is confined to British manufacturing firms, which shall be deemed in this instance to be firms whose principal works and head offices are situated within the British Empire and which are not controlled by foreign interests. Exhibitors are not permitted to exhibit goods other than those they actually manufacture. The result is that buyers who visit the fair know that no article shown on an exhibitor's stand can be purchased elsewhere in the fair, while the exhibitors on their side can rely on the fact that all visitors are trade buyers. So organized, the British Industries Fair is immeasurably more valuable to both exhibitors and buyers than a fair in which the same article may be shown upon many exhibitors' stands and where the visitor may spend much of his time in comparing the different prices at which it can be purchased. By excluding the general public and restricting admission to trade buyers the exhibiting manufacturer is saved the great waste of time in which he would be involved by exhibiting and explaining his wares to persons who had no other motive

for visiting the fair than that of curiosity. In these two particulars the organization of the British Industries Fair shows a great advance upon other fairs.

Another point in which the British Industries Fairs are an advance on the fairs which have been organized in various towns on the continent is that participation in the fairs is restricted to manufacturers of goods which are really suitable for inclusion. At some of the fairs which have been held on the continent such articles as railway engines, big guns and other products of engineering works have been exhibited, although it is clear that they are not articles which are purchased by the trade buyer in quantity for stock and re-sale. An examination of the schedule of the trades included in the British Industries Fair, 1920, will at once show that participation is confined to goods which are such as would be purchased for re-sale by wholesale and retail traders.

How to Participate

For manufacturers, participation is both cheap and simple, since, although the fairs are financially self-supporting, the making of a profit is not aimed at by the Board of Trade, and because, so far as possible, each exhibitor is allowed to exhibit in the form he prefers. At no other fair can an exhibitor place his samples before the world's buyers for so trivial a sum as at the British Industries Fair. Many exhibitors on small stands measuring 6 feet by 6 feet have been able to display their samples for a total sum of less than £10, and many exhibitors have found that their total expenses did not amount to 1 per cent. on the orders which they booked. In one case which has come to the department's knowledge an exhibitor's total expenditure was less than one half per cent.

The erection of their stands being left to the exhibitors, each exhibitor is able to erect the stand most suitable to his requirements. Should he wish to do so, he can erect an expensive office. Equally, should he so wish, he is at liberty to erect the simplest possible stand. At the same time, however, the department is prepared in the future, as it has been in the past, to place the orders for exhibitors' stands as part of a scheme by which simple but serviceable stands can be erected at the lowest possible cost.

The new London home of the British Industries Fair is the largest exhibition building in the world, and it is difficult to convey any adequate idea of its vastness. So large is it that the figures which represent its dimensions serve to confuse rather than to explain.

The enormous extent of its total floor area can, however, be understood from the fact that it amounts to approximately 20 acres, of which 14 acres are upon the ground floor.

Practically every part of the building has direct overhead light, and no less than 25 acres of glass are employed to achieve this result.

To heat the vast building there are over fifty miles of hot-water pipes, and the water travels one and three-quarter miles after leaving the boiler before completing its circuit.

The main building alone is over 1,600 feet in length, a measurement which can be gauged by comparison with the length of St. Paul's Cathedral, which is 500 feet.

This visitor in walking from one extreme end of the building to the other covers a distance of over half a mile.

The great columns which support the domed roof measure no less than sixteen miles in total length.

In the centre transept the glass roof is 200 feet above the ground, and the height of the building throughout its length is 100 feet.

Hints for Intending Exhibitors

Applications for space will be received up to a date which will be stated on the application form, and only applications received before that date will be considered.

As in the Fairs which have already been held, exhibitors will not be able to select the position of their stands, the allotments of space being made by the department. All exhibitors in the same section will, however, be grouped together, so ensuring that the positions allotted to competing firms are as nearly as possible of equal value. The actual ground plan of the Fair will not even be drawn up until all applications have been received, as it has been found that the space can be much more advantageously split up to suit the various exhibitors' requirements than exhibitors' applications can be fitted into a pre-arranged scheme.

As soon as possible after the closing date for the receipt of applications for space a plan showing the site which has been allotted to him will be forwarded to each exhibitor, who should at once make the necessary arrangements for the erection of his stand. In order to interfere as little as possible with the various exhibitors' ways of displaying their goods, exhibitors are allowed to make use of the services of any stand contractor they choose, subject only to the approval of the department.

To assist exhibitors who are unable or unwilling to undertake the work of ordering their own stands, the department will arrange, as they have done at past Fairs, for the erection of simple stands of uniform design and at a uniform price, and will place orders for such stands on behalf of any exhibitors who authorize them to do so.

Assistance is given to exhibitors in other directions, and participation in the British Industries Fair becomes, as stated, an exceedingly simple matter.

The department assists in the transport of exhibitors' goods and samples to the Fair by securing for them reduced railway carriage and by their handling, without extra charge, within the Fair. On delivery by the railways and carriers exhibits are received by the department and are placed on the site allotted. Directly the exhibitor has unpacked his samples, his empty packing cases are removed, stored during the period of the exhibition, and returned to him by the department at its close.

All invitations to visit the Fair are issued by the department, and exhibitors are consequently saved the trouble and expense of sending cards of admission to their customers.

Where to Apply for Space

Canadian Manufacturers who may be desirous of participating in these trade fairs through the medium of exhibits of their goods are advised that application must be made through H.M. Trade Commissioners. The addresses of those in Canada are as follows:—

The Senior British Trade Commissioner in Canada and Newfoundland, 367 Beaver Hall Square, Montreal.

The British Trade Commissioner (for Ontario), 257-260 Confederation Life Building, Toronto.

The British Trade Commissioner (for the Prairie Provinces and British Columbia), 610 Electric Railway Chambers, Winnipeg.

Under the old system, by which a fixed number of tickets were given to each exhibitor for issue to his customers, it was found that the principal trade buyers received an invitation from practically every exhibitor and that other would-be buyers received no invitations at all. Under the present system exhibitors are invited to forward to the department the names of any buyers they would wish to be invited, and the names they forward, which are not already included in the department's card indexes of buyers, are at once added and invitations issued to them. As the index already contains over 100,000 names, it is but rarely that an exhibitor submits the name of a buyer not already included.

A Joint Committee of Management and Workmen

PLAN OF ROBB ENGINEERING WORKS, LIMITED

A DEVELOPMENT, the working out of which will be watched with much interest by other manufacturers, has taken place at Amherst, N.S., where the Robb Engineering Works, Limited, have created a permanent joint committee of management and workmen. The scope and purpose of the committee is clearly set out in the constitution and by-laws which were adopted on July 9. These are as follows:—

CONSTITUTION

1. Membership

The membership of Robb Engineering Works' Joint Committee shall consist of a number of members appointed by the workmen of the Robb Engineering Works, Limited, and an equal number of members appointed by the management.

2. Objects

(a) That the workmen in the Robb Engineering Works be given a wider interest in, and a greater responsibility for the conditions under which their work is performed.

(b) The settlement of general principles governing the conditions of employment, including the methods of paying and re-adjusting wages, having regard to the need for securing to the workmen a share in the increased prosperity of the industry.

(c) The establishment of regular methods of settling differences between employers and workmen and to their better adjustment when they appear.

(d) Better utilization of the practical knowledge and experience of the workmen.

(e) Improvements of processes, machinery and organization.

(f) Technical education and training.

(g) Consideration of sanitary conditions, and the study of comfort for workmen.

(h) The institution of Safety Committees for the introduction of safety devices and methods.

(i) Robb Engineering Works, Relief Society Organization.

It is understood that the engaging or discharging of men, the setting of rates of wages, hours of labor, overtime, etc., will be arranged between the superintendents, foremen and workmen as at present. These matters may be discussed informally by the Joint Committee at regular meetings, and committees appointed to investigate and report on best methods of settlement, as referred to in the above clauses (b) and (c), but the settlement of wages, hours of labor, etc., must be directly between the workmen and foremen, superintendents and management.

3. Members

The members of the Joint Committee to be appointed by the workmen of the Robb Engineering Works, Limited, shall be as follows:

One member each from the (1) Engine Department; (2) Tractor or Light Machine Department; (3) No. 2 Machine Department; (4) Tool Department; (5) Pattern Shop; (6) Blacksmith's Shop; (7) Yard Department; (8) Stores; (9) Office; (10) Draughting Department; (11-12) two members from Foundry; and (13-14) two members from Boiler Shop.

The members to be appointed by the management to consist of:

The General Manager; (1) Chief Engineer; (2) General Superintendent of Foundry and Machine Shop; (3) Superintendent of Boiler Shop; Foremen of each of the following Departments; (4) Engine Department; (5) Tractor or Light Machine Department; (6) No. 2 Repair Machine Shop; (7) Tool Department; (8) Foundry; (9) Pattern Shop; (10) Blacksmith's Shop; (11) Yard; (12) Superintendent of Stores; (13) Chief Accountant; and (14) Chief Draughtsman.

In case of the unavoidable absence of any member of the Joint Committee, a substitute for any member representing the management may be appointed by the superintendent or foreman of any department, or by the workmen of any section for a member who is absent in their section.

Members of the Works Committee shall be elected for a term of six months, the elections to be held on or before the 15th of January and 15th of July in each year. Members are eligible for re-election. A list of the members elected shall be furnished to the management through the secretary.

4. Election of Members

Election of members to Joint Committee to be either by ballot or by majority vote at a meeting of each section of the works, as specified in clause 3.

5. Officers

The officers shall consist of Chairman, Vice-Chairman and Secretary. A permanent Secretary shall be appointed by the Committee each year at the first meeting in January, who shall keep all the records of meetings and other business transacted and shall receive therefor a salary of $5.00 per month, to be paid by the Robb Engineering Works, Ltd.

It is understood that the General Manager will be the permanent Chairman, and Chief Engineer the Vice-Chairman in the absence of the Chairman of the Joint Committee.

6. Voting

The General Manager shall not vote except in case of a tie. It is understood that the majority vote of the members present at any meeting, shall be binding on the management and workmen, unless by request of any member the voting may be postponed to a special meeting to be called for that purpose, due notice of the object and date of the meeting to be given at least one week in advance.

Any motion passed by open vote or ballot at a regular meeting of the Joint Committee may be rescinded and a new vote taken at a special meeting called for that purpose, by request in writing of ten members of the Joint Committee, presented to the Chairman.

Any question arising which affects any one Department, may be dealt with by the members of the Joint Committee representing that Department, together with an equal number of committee members appointed by the management.

7. The Vote

In case of a tie vote at any regular or special meeting of the Joint Committee, the Chairman shall decide the vote, but on request of any member of the Joint Committee, an independent person shall be selected, by the Chairman and one member of the Committee who shall be selected by the workmen, to give the casting vote.

8. Meetings

Regular meetings shall be held in the Robb Engineering Works' Firemen's Hall, on the second Wednesday of each month, at eight o'clock p.m.

9. Special Meetings

Special meetings may be called on the request of three members and must be called on the request of ten members in writing. Notice of any special meeting shall be given not less than three days in advance, and shall state the object of the meeting. No business except that called for in the notice shall be transacted at a special meeting.

10. Quorum

Not less than ten members, exclusive of the Chairman, shall constitute a quorum, and shall consist of not less than five members representing the management and five members representing the workmen.

11. Amendments to By-laws

Amendments may be made in the By-laws, Constitutions and Objects of the Joint Committee of the Robb Engineering Works, by notice in writing given at a previous meeting and by two thirds vote at any regular meeting or special meeting called for that purpose.

12. Order of Business

Reading of Minutes.
Objects of Joint Committee as set forth in Clause 2.
General Business.

13. Minutes

The minutes of every meeting shall be read by the Secretary and approved at the succeeding meeting. The minutes shall be open to inspection of any member at any time on request to the Secretary.

14. Vacancy

Any vacancy occurring by reason of a member leaving the works, or by vote of employees in his section of the Works, shall be replaced by ballot or vote of employees in the section to which the member belongs.

15. Meetings of Section

Meetings of any section of the Works may be held in the Firemen's Hall of the Works, at any time appointed by said section.

Well-Rounded Scheme of Industrial Benefits

Features of the Plan of Welfare Work to be Inaugurated by the Dominion Chain Co., Limited—An Employees' Society Formed for Membership in which Every Worker in Office and Factory is Eligible—Benefits of Membership Take in a Wide Range of Services

By J. R. HAMILTON

IN what is declared by experts to be one of the most comprehensive plans of insurance and benefits yet worked out in any Canadian or American industrial concern, employees of both factory and office of the Dominion Chain Company, Limited, Niagara Falls, Ont., have been given the outline of an organization in which it is proposed that they and the company shall join to carry out the following programme:

1. Sick benefits.
2. Death benefits, graded according to number of dependents and length of service.
3. Funeral expenses.
4. Allowance to old employees who are disabled.
5. Guaranteed competence in old age.
6. Birth benefits.
7. Annual vacations with pay.
8. Free legal advice.

The organization which is to have the complete administration of these insurance, endowment and welfare features is to be called the Acco Employees' Society, and formation of it is already under way. Every worker in the Dominion Chain Company, Limited, both in factory and office, is eligible.

The object of the plan is to protect the employees of the company not only against those accidents and liabilities for which ordinary insurance is obtainable, but at the same time to provide for other contingencies for which insurance cannot be purchased.

Members of the Acco Employees' Society will pay an initiation fee of $1.00 and dues of 50 cents per month. The entire difference between this income and the expenses of the society is to be met by the Dominion Chain Company, Limited. The affairs of the society are to be administered entirely by its members, and they are to judge the merits of every case or claim coming up for action. The company is represented through the secretary-treasurer of the society, but the members or board of managers determine not only the time, form and amount of all payments under the regular cases provided for in the rules, but also have the authority to recommend special payments for extraordinary occasions or exceptions to the established rules.

While one or more of the benefits worked out in the Acco plan have been tried in various Canadian and American industrial institutions, so far as is known the present undertaking is more complete than any that has gone before it. Officials of the company have been at work on the plan for many months, during which time they have advised with insurance actuaries, health and welfare workers, administrators of fraternal and group insurance plans, and have consulted all available sources that would disclose the best American practise and experience.

The result of these investigations has not only led the Company to go farther than any predecessor in working out a complete programme of protection, but also has resulted in the Company's assuming the risk itself by the setting aside of sufficient reserve funds. There is no outside insurance company concerned in the Acco plan in any way, but, on the contrary, it is 100 per cent. a matter between the Company and its workers.

The men were invited to suggest improvements and alterations in the outlines and a number of these suggestions have been written into the plan.

One of the innovations in the Acco plan, which it is felt will attract a great deal of attention throughout Canada and the United States of America, is the extension of an annual vacation with pay to all employees of the Company. In most concerns this privilege is reserved for office workers and executive staff, the rest of the factory being considered on a "time" basis. Under the Acco plan all members of the society are to be put on the vacation basis, this being part of the programme not only of insurance against ill health, but of positive steps to protect and build up health.

Along the same line the Company will work out a vacation bureau to guide and help its employees in the matter of getting the most out of their vacations, finding the most satisfactory resort, making the most advantageous arrangements for travel, and, in general, placing at their disposal the services of an expert vacation bureau. There will be this difference from the ordinary, however, that it will work solely for the benefit of the vacationer and not to promote railroad or steamship line or pleasure resort.

Along the same line it is the purpose of the Company to employ a graduate nurse, who will be at the service of every member of the society for advice and assistance on medical and health matters, and who will make a specialty of health service in the homes.

The Acco Plan at a Glance

Open to all workers, factory and office, of the Dominion Chain Company, Limited.

Administered by the employees through Acco Employees' Society, with nominal dues.

Affords the worker health insurance ranging in protection from twelve weeks' payments to fifty-two weeks' payments according to length of service with company.

Pays cash benefit of $25 for birth in the family, together with all necessary attendance of doctor and nurse.

In event of death pays cash benefit of $100 for funeral.

In event of death, pays insurance benefit ranging from $1,000 to $5,000, according to length of service and number of dependents.

Guarantees annual vacation with pay, with services of expert vacation bureau.

Protects worker who becomes permanently disabled.

Guarantees competence in old age through paid reserve force.

Affords free legal advice.

All payments guaranteed by the Dominion Chain Company, Limited, through Acco Employees' Society without any outside insurance company or other intermediary.

Another feature of the Acco plan that is bound to attract great attention is the provision for birth benefits. It is a peculiar coincidence that while such a plan was actually being worked out in practise by the Dominion Chain Company, the Peace Conference in Paris was recommending the study of this subject as an important social institution for the benefit of the world, and such a recommendation is included in the Peace Treaty.

The Acco plan provides a two-weeks' advance attendance of doctor and nurse upon the expectant mother, followed by a similar attendance as long as may be necessary after the birth. While the doctor and nurse will be in the Company employ, arrangements will be made with a number of doctors and nurses in Niagara Falls and vicinity, so as to afford the parents a range of choice.

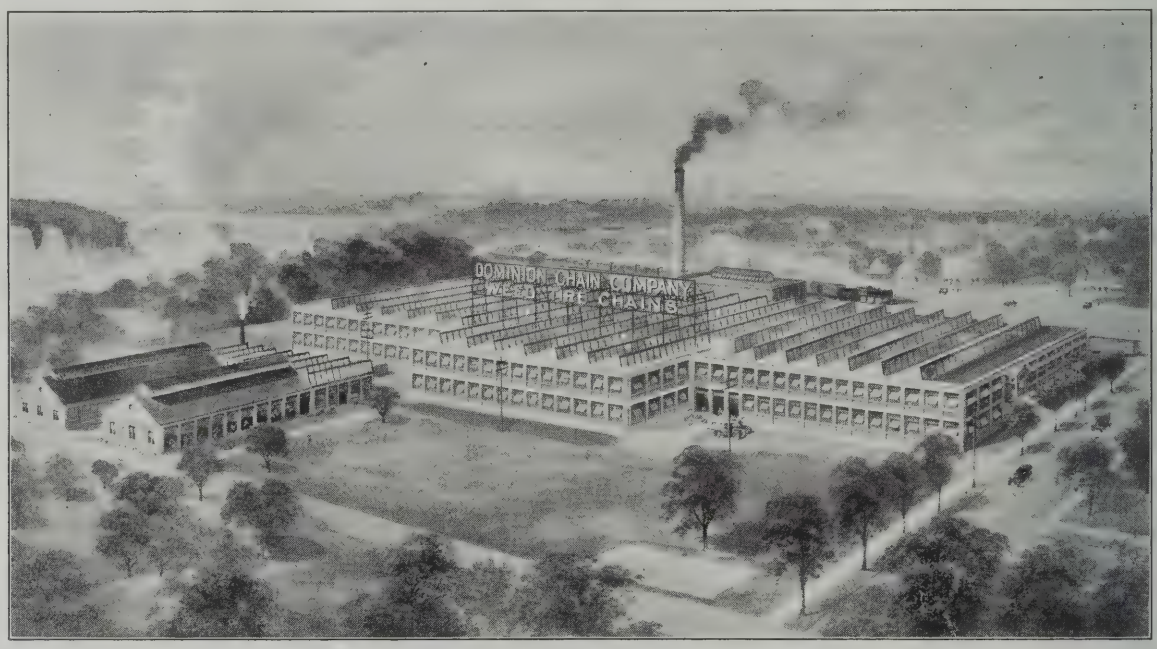
In addition to this medical service, a cash payment of $25 accompanies each birth, to provide the necessary clothes for the baby and to meet other expenses incidental to such occasions.

While the Workmen's Compensation Act in this country and the United States safeguards the worker against the accidents of his trade, he has no protection but his own against sickness, and it is to relieve this situation that the sick benefit feature of the Acco plan has been worked out.

Under this plan every member of the society is entitled to payment of a sick benefit of $2.00 a working day, beginning on the fourth day of his illness. The extent to which this payment continues is dependent upon the length of time in which the patient has been in the employ of the Dominion Chain Company, Limited. A person who has just entered the service of the Company is paid the benefit during the time of his sickness up to a period of twelve weeks. A person one year in the service of the Company can get a maximum sick benefit of sixteen weeks' payment, and so on up to the employee who has been ten years in the service of the Company and is entitled to sick benefit up to fifty-two weeks, or a full year.

In cases where the sick benefit and the Workmen's Compensation Act come into operation together, both payments are not made, but the patient gets whichever payment would be the larger. The laws of the society provide for a visiting committee to keep up the friendly touch with the sick ones who are cut off from their friends and fellow-workers, and the society itself determines the extent and duration of the sick benefit claims.

Death of a member of the Acco Employees' Society brings two insurances into operation. One is an immediate payment of $100 for a proper funeral. This payment operates without regard to the length of time a person has been in the Company's service. The other payment is a life insurance policy, ranging in size both according to the number of dependents and the length of service of the employee, while the manner of the payment, whether in a lump sum or in instalments, is to be determined by the society itself, according to the problems involved in each case.



Plant of the Dominion Chain Company, Limited

At which the Acco Plan of Benefits is being introduced. The officers of the company are: W. B. Lashar, President, Bridgeport, Conn.; W. P. Kearney, Vice-President and Secretary, Montreal, Can.; W. T. Morris, General Manager, Brooklyn, N.Y.; E. P. Grobb, Sales Manager, Niagara Falls, Can.

In the case of a married man, who has been working for the Company one year or less, there is a payment of $1,000 to the widow and $200 for each child or dependent brother and sister, or $500 for a dependent father or mother.

In case of longer service in the Company, the payment for each dependent child, brother or sister is the same, but the payment to the widow, or to the dependent father or mother, is graded upward in proportion to the length of service. A person in the service of the Company five years would leave a death benefit of $1,500, payable to his widow, and $750 for a dependent father or mother, plus $200 each for any child or dependent brother or sister.

The limit of the life insurance is reached in the case of an employee ten years or more in the service, who would leave an estate of $2,000 to the widow, $1,000 each to a

dependent father or mother, plus the usual allowances for the other dependents. Or if there were no dependents at all, there would be a payment of $500 for the nearest relatives.

Terror of an old age of poverty, neglect or want is entirely removed by the Acco plan, which carries two provisions for this end.

Every member of the Acco Society who has been ten years or more in the service of the Company thereby creates for himself an insurance policy, which the Company underwrites, against permanent disability. In the case of such disability the Company undertakes to make proper provision for the disabled person, basing such provision on the needs in each individual case and the recommendations of the Board of Managers.

A Reserve Force

For persons who have been in the employ of the Company for a period of twenty years or more, and have reached (in the case of a man), the age of 65, or (in the case of a woman), the age of 55, a Reserve Force is created, and they will be paid for service on such a force; whether service is required or not. They may be called upon for such light duties as are congenial and suitable.

Pay on the Reserve Force depends upon the length of service with the Company, and upon the highest earnings received in any ten-year period. The basis having been reached by averaging the highest ten years' earnings, 1½ per cent. of this amount is paid for each year of service. Thus, a person twenty years in the employ of the Company would command, on the Reserve Force, 30 per cent. of his highest earnings with the Company; if thirty years with the Company, he would receive 45 per cent. of his highest earnings.

The final provision which goes with membership in the Acco Employees' Association—free legal advice—is self-explanatory. This is extended, at the Company's expense, not only to the member but to his family. The Company does not assume the expense of actions at law, but where such actions are found necessary for the protection of the member, their expense will be kept to a minimum.

Draft of a charter and by-laws for the Acco Employees' Society has been drawn up by the Company, closely following the standard charter and by-laws suitable for any well managed sick and death benefit society, with slight modifications to suit the special case. Active direction of the Society's affairs will be in the hands of a board of managers of seven men, comprised of three executive officers—Chairman, Vice-Chairman and Secretary-Treasurer—and four nominated from the four; the secretary-treasurer and two members of the board of managers are nominated by the Company. Only members of the society in good standing can participate in its benefits or hold office.

Membership in the Acco Employees' Society at the outset is open to every employee of the office or factory.

After the charter period of one month, members subsequently admitted will be obliged to first pass a simple physical examination, expense of which will be borne entirely by the factory. The charter members are not required to pass this examination.

Canada's New Minister of Finance

A Brief Appreciation of Sir Henry Drayton

INDUSTRIAL CANADA congratulates Sir Henry Drayton on his appointment to the highly responsible position of Minister of Finance of the Dominion of Canada. As Chairman of the Board of Railway Commissioners, Sir Henry was brought into close contact with the business life of the country. He discharged the duties of the office ably and well, and those who have had to do with him in his capacity as chief of the Railway Board are confident that equal success will attend his administration of the Dominion Treasury.

An indefatigable worker of unimpeachable integrity, Sir Henry, while still a comparatively young man, has to his credit an enviable record in the service of the public. His first public position was that of assistant city solicitor of Toronto. Later he became Crown Attorney. In 1910 he accepted the appointment of corporation counsel, while the following year he was named as Toronto's representative on the Hydro-Electric Power Commission. On July 1, 1912, he resigned these positions to become Chairman of the Railway Commission.

As head of the Railway Board, Sir Henry acquired an intimate knowledge of the transportation problems of the Dominion which will be of inestimable value to his colleagues when transportation questions engage the attention of Council. His knowledge in this regard was further extended by acting on the Railway Inquiry Commission, whose findings are usually spoken of as the "Drayton-Acworth Report," and which deals with transportation necessities, the mistakes of the past in this connection, and the best means of rectifying them. The investigation required months of ceaseless toil and study, and the report is the most lucid and reliable work on this important subject. In these days, when public service is so often jeeringly referred to, and when pessimists claim that each man labors only for what he can gain thereby, it is worthy of note that Sir Henry Drayton returned to the Government the $15,000 offered him for his services in this connection, preferring that his efforts be looked upon merely as his contribution to the public good.

Another example of the services which the new Minister of Finance has rendered gratis to his country is his evidence before the Imperial Royal Commission investigating Shipping Combines. At the present time, when an extension of our ocean shipping facilities is so necessary to carry our agricultural and manufactured products to their ultimate markets overseas, his knowledge on this subject will be of immense value to the Government and to the Dominion.

Perhaps the greatest, though least recognized, service which Sir Henry has performed was in averting a coal famine during the war. The carrying capacity of the American roads was taxed to the limit in transporting their soldiers, munitions, and food supplies, to Atlantic ports, with the result that rolling stock was not available to bring from the South the coal required in Canada. By virtue of his position as Chairman of the Railway Commission, or possibly more by virtue of his pleasing personality and close acquaintance with the presidents and general managers of the United States railways, Sir Henry was able to make arrangements for the rushing of coal from the mouth of the mine to the furnace of the consumer, averting what might have been a very serious situation.

To Sir Henry every serious situation is merely a condition to overcome, and, to one of his tireless and fearless energy, no difficulty is unsurmountable. The financing of Canada at the present time is a big problem and it is in the hands of a big man.

State of the American Woolen Industry

A Comprehensive Survey of the Woolen Industry not only of the United States but of the World—It is valuable in that it shows the Extent of the Wool Supply and the Present State of the Industry, with a Forecast of Future Conditions

By E. M. M.

In the "Commerce Monthly" of the National Bank of Commerce, New York

THE woolen industry of the United States during the last four years has consumed one-quarter of the total raw wool produced in the world. A special census, undertaken by the Department of Commerce, as of July 20, 1918, shows the following consumption of wool in the grease:

1915	615,913,757 lbs.
1916	725,391,207 "
1917	768,272,175 "

The 1918 consumption, as reported by the Bureau of Markets of the Department of Agriculture, was the equivalent of 740,000,000 lbs. in the grease. During the five-year period immediately preceding the war our average annual consumption was roughly 510,000,000 lbs. The effect of the war in increasing our use of raw wool is manifest.

The United States produced less than half the amount of wool it used during the war, being forced to import the rest from other countries. The domestic clip has varied very little in thirty years, maintaining an almost constant level of about 300,000,000 lbs. The 1918 clip was 299,921,000 lbs. Our imports, though fluctuating more or less, have undergone a gradual increase to an annual average of nearly 400,000,000 lbs for the four war years. During the five-years preceding the war they averaged a little over 200,000,000 lbs.

At the present time wool stocks in the hands of dealers and manufacturers are low. The actual weights of grease, scoured and pulled wool, and of tops and noils held by dealers and manufacturers on recent dates were as follows:

December 31, 1917	453,048,586 lbs.
September 30, 1918	398,630,260 "
December 31, 1918	211,442,746 "

On December 28, 1918, total Government stocks of wool were reported to be 313,746,502 lbs., with about 70,000,000 lbs. in dealers' hands not yet billed to the Government. By adding to these amounts the stocks of wools held by manufacturers, Mr. Brand, Chief of the Bureau of Markets, estimates total stocks of grease, scoured and pulled wools in the country on December 31, 1918, at 461,397,423 lbs. If we add to this amount 300,000,000 lbs. as the probable amount of the 1919 clip, we arrive at 760,000,000 lbs. as our total supply for the coming year, not counting what we import.

With the resumption of more normal conditions in Europe, it is likely that our own woolen industry during 1919 will consume raw wool more nearly at a pre-war rate than at the rate of consumption during the war years. Hence, with imports conservatively estimated at from 200,000,000 to 300,000,000 lbs. during the year, there will probably be sufficient wool to supply the needs of our manufacturers and leave plentiful stocks on hand to begin the year 1920.

The special census of July 20, 1918, referred to above, shows that there has been a considerable increase since 1909 in practically all kinds of wool machinery. It also makes a detailed comparison of woolen and worsted products for the three years 1915, 1916 and 1917, indicating in almost every case an increase in output between 1915 and 1917. The principal woolen manufactures of the United States are yarns, woolen and worsted goods, carpets and rugs, and hosiery and knit goods. More than 600,000,000 lbs. of yarns were produced in each of the three years specified. More than 200,000,000 linear yards on an average of woolen or mixed woolen goods were produced in these years, and more than 250,000,000 linear yards of worsted or mixed worsted goods. Production of carpets and rugs varied between 60,000,000 and 75,000,000 linear yards. Large amounts of hosiery and knit goods were also produced.

As a result of the war not only our consumption of raw wool, but also our exports of woolen manufactures underwent a great increase. The demand of the Allied armies for clothing in 1915 and 1916 was very large. The following table shows how the war affected our exports:

Fiscal Year Ending June 30.	Exports of Wearing Apparel.	Total Exports of Woolen Manufactures.
5-year average, 1910-14	$1,871,448	$3,439,547
1915	9,108,900	27,327,451
1916	19,368,501	53,983,655
1917	8,748,722	18,423,556
1918	3,301,125	17,749,421
1919 (1st 6 months)	2,612,365	9,617,169

The great increase in 1915 and 1916 of our exports, both of woolen wearing apparel and of total woolen manufactures, is clearly shown. But in 1917 and 1918 exports fell off from the high figures of the first two years of war and the rate has not increased during the first half of the fiscal year 1919. Moreover, owing to the rise in prices during the war of wool and woolen manufactures, the figures for values do not reflect a proportional increase since pre-war years in the actual quantities of woolen exports.

Government Wool Control

After the United States declared war the wool industry was gradually taken over by the Government and became increasingly employed upon Government orders. The Government purchased domestic wool in the summer of 1917, but distributed none to manufacturers. In the spring of 1918 the Wool Administration was created. It purchased the 1918 domestic clip at prices 5 per cent. below those of June 30, 1917. Stocks of Australasian wool were secured by negotiation with the British Government. South American and South African wools were purchased during the summer of 1918 by a syndicate representing the United States Government, private importations having been forbidden in June. In September a Government buying commission was sent to Buenos Ayres, but had been in operation only a few weeks when the armistice was signed.

The end of hostilities caused an abrupt termination of further Government orders to manufacturers. The wool manufacturing industry came temporarily to a standstill on account of the cessation of demand from the Government,

uncertainty in the civilian wool trade, and lack of a free market for raw wool.

In the latter part of December, the Government began to dispose of its stocks by means of public auctions. Although the first few series of sales witnessed the withdrawal of a large percentage of offerings, the market has since stiffened considerably. On January 10 import restrictions were taken off raw wool, with the result that South African and South American wool may now be brought in freely by private importers. At present, however, the attitude of the British Government is against our being allowed to buy wool at the London auctions which began early in April. The United States Government has announced that it will suspend wool auctions for four months, beginning next July, in order not to compete with the new domestic clip. Enough wool has been sold at auction to allow the resumption of open trading on the Boston wool market, through diversion to the market of wool bought at the auction sales.

World's Wool Consumption

To understand properly the position of wool and the woolen industry in the United States, it is necessary to consider it in its relation to the wool production and consumption of the world. First of all, we must know how many sheep there are in the world and what countries have them. Statistics on this subject are unsatisfactory. The estimate for 1918 of the number of sheep in the world is 592,000,000. The figures as compiled indicate a gradual decrease since 1915, when the total number estimated was 634,000,000. The general average during the period from 1910 to date has been somewhere between 600,000,000 and 650,000,000. According to the latest compilations, Australasia is first with 103,000,000 sheep, Argentina second with 56,000,000, and the United States third with 49,000,000. Russia-in-Europe, South Africa and British India are next in order.

The world's wool clip has varied very little during the last ten years, averaging between 2,800,000,000 and 2,900,000,000 lbs., although the statistics here, as in the case of the number of sheep in the world, are rather meagre. The most recent figures place it at 2,809,000,000 lbs. Australasia, owning the most sheep, produces the most wool, the combined Australian and New Zealand clip amounting to 742,000,000 lbs., or two and a half times the clip in this country. Russia-in-Europe is reported as producing 320,000,000 lbs., but the figures are neither recent nor very accurate. As we have seen, the United States clip amounts to 300,000,000 lbs. Argentina, although reported to own more sheep than either Russia or the United States, produces only 258,000,000 lbs.

Government Control in England

The annual production of 2,800,000,000 lbs. of wool in the years before the war consisted of 1,000,000,000 lbs. of crossbred worsted wools, 1,000,000,000 lbs. of merino wool, and about 800,000,000 lbs. of coarse or carpet wools. In Australasia, the principal source of fine wools, there has been a tendency to change from the merino to the crossbred type, resulting in decreasing the supply of high-class clothing wools.

The principal wool consuming countries of the world are the United Kingdom and the United States. Before the war France and Germany were also important. The 1914 consumption was 515,000,000 lbs. in the United Kingdom and 505,000,000 lbs. in the United States. France was third, with 480,000,000 lbs., and Germany fourth, with 400,000,000 lbs. Austria, Hungary and Italy came next, but consumed little wool in comparison with the first four countries named.

The United Kingdom's woolen industry has been controlled during the war almost entirely by the Government, and has been devoted principally to supplying the needs of the British and Allied armies. It is estimated that 70 to 80 per cent. has been used for Government purposes.

The wool trade of France was thrown into confusion by the war. The principal wool manufacturing towns were in the invaded districts of northeastern France. At the present time, however, the textile industry is trying to get on its feet again. Manufacturers are preparing against the time when they may again be able to operate.

The Belgian textile industry was completely prostrated by the war. It will be years before it regains its former status, although like France, Belgium is preparing for a resumption of activity. Both France and Belgium have begun to purchase raw wools at the recently opened London auctions.

We know little about the German woolen industry except that during the war it has been cut off almost entirely from outside supplies of clothing wools, aside from what it stole in France and Belgium. Previous to the war the British Empire controlled the wool situation in all except low or carpet wools. Although Germany produces clothing wools herself, notably the fine wools of Saxony, they are not nearly enough to meet her requirements.

Great Britain

Great Britain is the only country whose woolen industry will be likely to compete with ours in the immediate future. Recent statistics are available regarding the amount of certain kinds of woolen textile machinery in the United Kingdom. A comparison with the 1918 census of textile machinery in the United States shows the equipment of the United Kingdom to be the more extensive.

	United States.	United Kingdom.
Woolen and worsted looms	76,585	121,551
Spindles—Woolen	2,705,625	3,066,047
Spindles—Worsted*	3,078,958	3,459,181
Combs	2,347	2,934

*Includes twisting spindles.

During the years preceding the war, the United Kingdom's consumption of wool was a little greater than ours. Her excess of imports over exports of other than domestic wool averaged 470,000,000 lbs. Her domestic clip averaged approximately 140,000,000 lbs., of which she exported about 70,000,000 lbs., or half. Her average consumption was consequently about 540,000,000 lbs. during the period 1909 to 1913. Our own consumption during approximately the same period, July 1, 1909, to June 20, 1914, averaged 510,000,000 lbs.

A comparison of the British export market for manufactured woolen goods with our own during pre-war years indicates that our export business had hardly made a beginning, although our mills consumed nearly as much raw wool as those of the United Kingdom. The average annual value of exports of woolen manufactures from this country during the five-year period ending June 30, 1914, was $3,500,000. During the five-year period ending December 1, 1913, the United Kingdom exported wool manufactures with an average annual value of £36,000,000, or $175,000,000. In other words, previous to the war the United Kingdom exported woolen goods worth fifty times those exported by the United States.

The British woolen industry is now in a state of stagnation, although Government control is being rapidly relaxed. The only Government wool purchase this year will be the Australasian clip; both the domestic and South African clips will be sold on the open market. All restrictions have been removed on the sale of wool and tops, and wool rationing

ended on March 31. Raw materials may now be imported freely.

The London auctions, which for so many years have held an important international position in the wool trade, were resumed early in April. Issue of wool at fixed prices outside the auctions will continue; general wool prices will be stabilized by altering these issue prices from time to time to accord with market appraisement as indicated by the auction prices. The first change in issue prices, in preparation for the auctions, was a reduction of 7½ per cent., taking effect April 1.

An interesting development in the British woolen industry is the recent establishment of a National Wool Textile Industrial Council, with an equal representation of employers and employees. This Council will devote itself to settling disputes and to a consideration of questions of wages, hours of labor, working conditions, and supervision of entry into and training of employees for the industry. It will make comparative studies of the woolen industry in various countries.

Half Our Machinery Idle

At the present time the woolen industry of the United States is operating on a restricted basis. Many mills are temporarily closed and a great many more are operating only at part capacity. The best index of the activity of the mills is the percentage of machinery in operation, or, inversely, of idle machinery.

The following table compares percentages of idleness of all kinds of woolen machinery on March 1, 1918, when activity was at its greatest; on December 2, 1918, shortly after the armistice was signed, and on March 1 of this year.

Kind of Machine	Percentage of Idle Machinery to Total Reported Mar. 1, 1918	Dec. 2, 1918	Mar. 1, 1919
Looms — Wider than 50 in. reed space.	8.2	22.5	58.1
Looms — Under 50 in. reed space	8.0	24.9	42.4
Looms — Carpets and rugs	31.0	58.0	61.4
Cards	4.6	13.8	39.1
Combs	8.3	17.8	47.8
Spinning spindles — Woolen	5.5	16.1	41.8
Spinning spindles — Worsted	12.7	27.4	52.7

The most striking thing is the sudden jump in percentage of idleness since last December. Summarizing the present condition, we find on March 1 of this year that practically half of the country's wool machinery was idle. This figure has never come anywhere near being reached before since the beginning in 1913 of tabulation of active and idle machinery.

Decrease in Government Orders

With the recent decrease in activity, there has come a corresponding decrease in the proportion of machines employed on Government orders, which had steadily risen while the United States was at war. The percentage on Government orders of every machinery group doubled or more than doubled between August 1, 1917, and October 1, 1918, with the result that on the latter date from one-half to three-quarters of all kinds of machinery in operation, with the exception of narrow cloth looms and carpet and rug looms, were running on Government orders. With the signing of the armistice the percentage diminished, until on March 1, 1919, less than 6 per cent. of any machinery group was engaged on Government orders.

The following table shows Government use of machinery from August, 1917, up to March of this year.

Kind of Machine	Percentage on Government Orders to Total in Operation* Aug. 1, 1917	Oct. 1, 1918	Mar. 1, 1919
Looms — Wider than 50 in. reed space.	28.6	56.9	4.2
Looms — Under 50 in. reed space	7.8	16.6	2.4
Looms — Carpets and rugs	....	19.2	.0
Cards	32.1	61.9	4.1
Combs	21.4	74.6	.4
Spinning spindles — Woolen	33.5	60.7	5.7
Spinning spindles — Worsted	26.5	58.1	.4

*Percentages for March 1, 1919, relate only to machines on single shift, but as the latter constitute almost the entire number of machines in operation, these figures are comparable to earlier figures.

From the idle state of wool machinery we should naturally expect decreased consumption of raw wool. The following table, comparing average monthly consumption in 1917 with consumption at various times in recent months, bears out this expectation. The figures represent grease equivalent, that is, the amount that the wool would weigh were it all in the original greasy condition in which it is removed from the sheep's back.

	Consumption
Monthly average, 1917	64,000,000 lbs.
February, 1918	63,700,000 "
October, 1918	60,133,392 "
February, 1919	27,500,000 "

A year ago February consumption was thus what may be regarded as normal for a war month. In October, the last full month before the armistice, it was still practically the same. But after that consumption of raw wool fell off steadily to 27,500,000 lbs. in February, 1919, the lowest figure ever recorded in the monthly reports of the Bureau of Markets.

Sale Prices Firm

Wool manufacturers are nearly unanimous in expecting no great activity until later in the year. However, recent auction sales have witnessed a keen demand for high-class wools. Although the Government, following the example of Great Britain, reduced its minimum prices 7½ per cent. in the latter part of March, the demand for fine wools had increased to a point where this reduction had practically no effect on the actual sales prices. These sales prices have continued firm at the latest auctions. In the case of inferior wools, the reduction of minimum prices has resulted in many cases in lowering the quotations.

Wool prices multiplied nearly three-fold during the war. The decrease since the armistice has not been great, in view of the sudden change in industrial conditions. Trade opinion differs as to the future of the price of raw wool, although a considerable section of the trade does not look forward to any immediate decrease. It is now pretty generally the belief of the trade that piece goods have reached bottom prices. Moreover, present stocks of piece goods are low. In view of this situation an early resumption of activity might be expected, were it not for other factors. It is claimed that the cash basis of the Government auctions has prevented small manufacturers from getting supplies. Labor troubles have tended recently to curtail the output of mills. Little decrease in the high wages now being paid is expected. A shortage of labor may result from the scattering of skilled workers owing to the shutting down of so many mills. However, once confidence is restored, most manufacturers expect great activity, for the civilian demand for clothing and other

woolen goods has been abnormally suppressed for a long time and is beginning to make itself felt.

As was remarked above, there will probably be plenty of wool to supply the needs of the industry for the coming year, 760,000,000 lbs. representing approximately the amount we can count on outside of our imports. With South Africa definitely declared a free market and with large amounts available in Argentina and Uruguay, we need have no fears about foreign supplies. Although the Australasian clip has been purchased by Great Britain, and American buyers excluded from the London auctions, the Government has already received 100,000 out of 325,000 bales of Australasian wool which it arranged last fall to purchase from Great Britain. If the remainder of this purchase is brought to the United States, we shall have received during the year approximately 120,000,000 lbs. of Australian and New Zealand wool, making our total supply for the year 880,000,000 lbs., exclusive of South American and South African sources.

Few of our manufacturers fear English competition in domestic markets, for they believe England will have plenty to do in supplying Europe with woolen goods. Also they do not expect the English woolen industry to resume until some time after our own.

Our manufacturers do not look for an extensive export business in most lines of woolen goods. The United Kingdom's domination of the woolen export trade in pre-war years shows how hard it will be to compete permanently with British goods in neutral markets. Nevertheless, the opportunity exists now to get a foothold in foreign countries. The London *Statist* in several recent issues has sounded a note of warning to the English trade, making the statement that United States export houses are breaking new ground in neutral Continental markets and that sales are actually taking place in woolen goods hitherto provided by English and German firms. The formation of export associations for the marketing of textile products abroad is significant of the determination of American woolen manufacturers to broaden their markets. But any foothold gained now during the disorganization of British production can be held permanently only by bringing our industry to that pitch of efficiency for which the woolen industry of Great Britain has always been famous.

Hours of Work, Health and Output

Report of the National Industrial Conference Board

IN a report just issued by the National Industrial Conference Board the conclusion is reached that in the metal manufacturing industries it is possible for "a considerable proportion of establishments to maintain production on a schedule of fifty hours per week," but that such a schedule "could not be universally adopted by these industries without some loss in production."

In the case of a 48-hour week a smaller proportion of establments reported production as maintained, and several of these, because of unusual size, exacting nature of the work, or other reasons, were not representative organizations. Notwithstanding the fact that reductions to such a week proved satisfactory from a production standpoint "in a sufficient number of cases to invest such a schedule with a high degree of interest," the report holds that "the weight of the evidence leaves little ground for doubt that a general reduction to a 48-hour week at the present time would mean a serious loss to effective production.

"The amount of handwork as contrasted with automatic-machine work exerts an important influence on output. In establishments where a very large percentage of the work is performed by highly automatic machinery the evidence indicates that in general maximum production cannot be had on a schedule as low as forty-eight or fifty hours per week."

The investigation developed no significant change in the health of metal workers resulting from reductions in work hours. The tuberculosis death-rate in certain branches of metal manufacturing industries, as for many other indoor occupations, is high. It is notably high among brass workers. On the whole, however, the report finds that health conditions among workers in the metal manufacturing industries are relatively favorable, judged by the average hazards of industrial employment.

Everything Depends on Co-operation

The report points out that a distinction should be made between what can be done on a 50-hour schedule and what, as a practical matter, will be done. Much depends upon the degree of co-operation secured between the management and its workers. If full co-operation to attain the highest reasonable efficiency could be secured, there can be little doubt that a 50-hour week could be very generally adopted in the metal trades without serious disadvantage. "No single factor," says the report, "could do more to accomplish this result than the recognition by workers of the indisputable principle that their real interest and that their real opportunity for bettering their condition lies in increasing the efficiency of individual production. . . . . If both management and workers would actively co-operate to this end, moreover, a 48-hour week might prove practicable in a larger number of establishments than is now the case. But unless such co-operation is secured there can be little question that the general adoption of a 48-hour week in the metal trades would involve a serious economic loss to the nation."

The report includes the metal trades proper, foundries, automobiles, hardware, electrical equipment, and some miscellaneous establishments. In the course of the investigation two questionnaires were sent out, one in the latter part of 1917, the second in March, 1919. Replies were received from 1,247 establishments, employing 755,534 workers. Of these, 409 establishments, employing 361,371 workers, had reduced hours, and furnished data as to the effects of such reductions.

Evidence Furnished by Questionnaires

The evidence furnished by the two questionnaires for the 50-hour and 48-hour groups, in which as a practical matter interest chiefly centres, is summarized as follows:

EFFECT ON OUTPUT: 48-HOUR GROUP.

		1917. Per cent. of Total		1919. Per cent. of Total
	Establishments.	Employees in Group.	Establishments.	Employees in Group.
Increased	5	*67.1	1	8.4
Maintained	13	16.4	4	2.6
Decrease, less than proportional	4	2.9	9	32.2
Decrease, about proportional	10	9.4	14	40.7
Decrease, greater than proportional	1	.5	3	1.4
Decrease, amount not stated	8	3.7	9	14.7
Totals	41	100.0	40	100.0

EFFECT ON OUTPUT: 50-HOUR GROUP.

Increased	4	4.9	2	8.6
Maintained	28	47.8	9	11.9
Decrease, less than proportional	12	28.4	9	42.6
Decrease, about proportional	10	9.7	7	10.6
Decrease, greater than proportional	2	3.4	1	1.6
Decrease, amount not stated	10	5.8	7	24.7
Totals	66	100.0	35	100.0

*Over 60 per cent. of the employees in the 48-hour group were in two establishments.

In the case of the 48-hour group covered by the 1917 returns, the establishments reporting an increase in production had more than two-thirds of the total number of workers. However, one of the establishments increasing production was exceptionally large, which gives a disproportionate weight to the "increased" group from the standpoint of numbers employed. It is, nevertheless, significant that sixteen other establishments, none of which were of unusual size, reported either an increased or a maintained output under such a schedule.

Of sixty-six establishments which reduced to a 50-hour week, four reported production as increased, twenty-eight as maintained, and thirty-four as reduced. The groups maintaining or increasing production, therefore, represented approximately half the number of establishments in this group, a proportion sufficient to indicate the practicability of a 50-hour schedule for a considerable section of the metal manufacturing industries. These two subgroups together had rather more than half the total number of workers included in the 50-hour group. Moreover, in three of the establishments reporting production as decreased, piece-workers maintained their output, while in five others the loss was comparatively small.

Working Hours and Production

The results of the 1919 inquiry are considerably less favorable to the practicability of a 48-hour or a 50-hour week than are those obtained in response to the 1917 inquiry. So far as the 48-hour group is concerned, the number of establishments maintaining or increasing production on such a schedule was small, and also the number of workers included in them. In the case of the 50-hour schedule, likewise, the number of establishments maintaining or increasing production was comparatively small—eleven, as against twenty-four reporting a decrease—while they had only about one-fourth the number of workers included in the group reporting a loss in output. In this connection the report points out that practically all of the experience obtained through the 1919 questionnaire occurred under highly abnormal conditions. During the greater part of 1918, when approximately one-third of the reductions covered by this questionnaire took place, wages were exceptionally high and the demand for labor was extraordinary. On the other hand, after the signing of the armistice, business in many branches of the metal trades was more or less demoralized, and frequently there was a shortage of orders, so that workers had less incentive to maintain maximum efficiency, while the mere reaction from the extraordinary stress of war in itself often had a tendency in the same direction. For all these reasons, the evidence gathered by the 1917 questionnaire is a safer criterion of the practicability of a shorter hours-of-work schedule than is that obtained through the 1919 questionnaire.

A striking feature of the report is the rather general satisfaction with a 50-hour week or a 48-hour week expressed by manufacturers who had reduced to such schedules. Of the forty establishments which had reduced to a 50-hour week, twenty-nine expressed a preference for such a schedule; while of forty which had reduced to a 48-hour week twenty favored this schedule and ten others a 50-hour schedule.

It is true that establishments operating on a 54 or a 55-hour week in nearly all cases expressed a preference for the particular schedule they were operating on. The experience of these manufacturers who had not reduced hours below fifty-four per week cannot in fairness, the report holds, be given equal weight in reaching conclusions as to the practicability of a 50-hour or a 48-hour week with that of employers who have operated on such shorter schedules.

An important fact brought out by this study, as well as in the reports on several of the other industries included in the board's investigation of the hours-of-work problem, is that there is no clear-cut line below which a reduction in hours brings a practically uniform change in results. Thus, despite the fact that a substantial number of establishments maintained production on a 48-hour week and a rather large number on a 50-hour week, a majority of establishments reducing only to 54 or 55 hours per week reported that production was decreased.

The results of reductions in hours presented in the report are based chiefly on the judgment of manufacturers as expressed in their replies to questionnaires.

The report clearly indicates that piecework is more conducive to efficiency than is day work. "In this connection the rather low percentage of piece-workers in the industry as a whole, as compared with the other industries thus far investigated, suggests that there is opportunity to increase efficiency by increasing the number of workers on a piece-rate basis. The difficulties in the way of this, however, are often great, especially in those cases where quality is the prime consideration."

The report points out that management methods have an important bearing on output results under any schedule of hours. A part of the differences in results obtained by establishments reducing to the same weekly schedule under apparently the same general conditions is attributed to differences in efficiency of management. Differences in the process, in the raw material, in the machinery, or in the type of workers, are also mentioned as important factors. The questionnaire aimed specifically to bring out the fact whether any important changes in these respects had occurred in a given establishment when hours were reduced, the object being to determine as accurately as possible the effect of changes in hours alone.

While a few establishments maintaining or increasing production or reduced hours-of-work schedules were exceptionally large, in general the size of the establishment was not an important factor in results.

The maintenance of output did not appear to depend upon the character of the industry. For instance, as between automobile, hardware and general machine shops, no significant differences in results when hours were reduced were apparent. Certain types of foundry work, however, present exceptions.

"Some evidence was obtained in the course of the investigation to the effect that in the case of work requiring unusual precision or which was for other reasons particularly exacting, there was more opportunity to introduce the eight-hour day successfully than in ordinary metal trades establishments."

Among the features of the evidence brought out by the study is the high percentage of open-shop establishments in the metal manufacturing industries. Replies to the second questionnaire indicated that approximately 93 per cent. of the establishments replying were operated on an open-shop basis.

General Health of Metal Workers

The report states that conclusions as to the effects of reductions in hours of work on health of workers in the metal trades industries cannot be reached at this time, for the reason that data covering a sufficient period to permit satisfactory study are not in existence.

Of those establishments replying on this point eight reported an improvement in health conditions following reduction in hours to fifty or forty-eight a week, while eighty-four reported no noticeable change. A particular difficulty in drawing conclusions from these statements arises from the absence of any recognized standard for measuring health conditions.

Statements of manufacturers furnished in the course of the investigation indicated generally favorable health conditions among their employees. Certain occupational diseases, such as lead and brass poisoning, are prevalent in the metal trades; lead poisoning, however, is not characteristic of the particular branches of the metal manufacturing industry included in this investigation. In some processes acid and other fumes introduce an occupational hazard.

"The evidence is clear," says the report, "that for a part of the industry the death-rate from tuberculosis is exceedingly and

unnecessarily high. It should, however, be pointed out that in general the branches characterized by exceptionally high death-rates from tuberculosis employ a relatively small proportion of the workers in the industry. It is obviously incumbent upon industrial managers to make intensive study of the conditions peculiar to these branches of the industry, with a view to devising some means for bringing about a reduction in this excessive rate. Furthermore, the rate is so high for the industry as a whole as to call for careful study of general working conditions and more exact knowledge of the causes contributing to tuberculosis.''

With reference to accident hazards the board finds that ''owing to the great variety and intricacy of much of the machinery used, the speed at which it is often operated, the use of acids and poisons, and the intense heat characteristic of certain operations, the accident hazard in the metal manufacturing industry is comparatively high.'' The accident death-rate, however, is lower than the average for all manufacturing and mechanical industries collectively.

Recognizing the importance of social conditions in the hours-of-work problem, the report says: ''Output and health are, of course, not the only tests of the justification of any hours-of-work schedule. The broad social aspects of the problem as to the proper work-schedule are of great importance. The social factors may, however, be more intelligently considered in the light of reliable information concerning the relation of health and output to hours of work. The purpose of this and the previous report in the series was to determine the facts on these fundamental points, leaving the social features for later discussion.''

The report is the fifth thus far issued by the board in the course of an extensive investigation of the effect of reductions of hours of work on output and on health of workers in various major industries.

Business Methods in Belgium

Points to be Observed in Seeking to Secure Orders from Belgian Merchants

The advantages of utilizing travellers rather than catalogues to secure orders from Belgian retail traders is emphasized by the British Vice-Consul at Charleroi, says the *Board of Trade Journal* (London). A well-known Belgian dealer in fancy leather goods informs him that the Belgian retail merchant rarely purchases from catalogues. Belgian manufacturers—and the Germans as well—have their customers waited upon by travellers carrying samples, and the catalogue is only a secondary means of reaching the client with any chance of success. Catalogues, he states, are a practical medium only in the case of goods which are too heavy or bulky to move about, and in such cases the Germans often organized at Brussels an exhibition in a room hired at an hotel, which they invited customers to attend, frequently repaying the railway fare.

If, however, the manufacturer wishes to resort to catalogues, the catalogue must be printed in French, with prices in Belgian francs, measurements according to the metric system, and adopting a nomenclature approaching as nearly as possible that current in Belgium. It is essential for manufacturers, before drawing up a catalogue or making a collection of samples, to make themselves acquainted with what has already been done, with the peculiar tastes of the Belgian clientele.

Prices must be stated in Belgian francs, goods delivered free of all costs in the customer's premises. It must not be forgotten that one is dealing mostly with retail merchants who are not well acquainted with such matters as transport customs, insurance, rates of exchange, etc., and who have neither the staff, the time, nor the means of passing goods through the customs or working out the actual cost price. The Germans sold goods in Charleroi delivered free of all costs. The customer knew that nothing could be added to the purchase price except his own profit, and knew also that no unforeseen charges would increase the cost price.

Here again the Germans showed their skill. They would never have asked for payment in advance, nor on delivery. They inquired into the credit of the customer before doing business, and, an order being booked, they gave credits of from thirty days to three months—sometimes even six months. As an example, one Belgian retailer has effected payment at thirty days, but with two per cent. discount, and, if the business done exceeded a certain figure annually, was credited with one or two per cent. additional discount, according to the firm.

Democratic government is a government of co-operation, the working together of individuals. The socialists are strong on co-operation. There is one thing they are extremely fond of, and that is co-operation; but it is a word they have no right to use, because co-operation is the working together, the result of individual impulse. Socialism is working together as the result of government and outward direction. That is the difference between socialism and the co-operation with which men worked together in the Liberty Loans. Democracy is working together through an inward impulse; socialism, through an outward direction.—*Prof. W. S. Myers.*



A Tractor "Made in Alberta"

This illustration derives special interest from the fact that it shows one of the first "Canadian" tractors to be built in Medicine Hat by the Alberta Foundry and Machine Co., Limited. The Company have already produced several of these machines and they have stood up well under a stiff agricultural test. Production is being continued, but the output will depend on the ability of the Company to obtain material

Music on the Payroll—An Aid to Efficiency

All Human Beings Bestow on Their Work the Reactions from the Influences to which They are Daily Subjected, and the More Interesting and Happier the General Community Life the More Attractive will be the Goods which that Community Manufactures and Sells

By J. A. FULLERTON

WITH results so immediate and definite in developing efficiency of the workers, by the employment of music in some form or other, the wonder is that more firms have not put music on their payrolls. It is strange that so unmodern a proposition should receive such tardy recognition by employers, and indeed, if they would let themselves visualize the effect of music on quantity and quality of output the musical directorship of any firm, with pretentions to be classed among the important industries, would be as essential as the factory superintendent. He would be a producer.

Manufacturers and other employers can see that better work and more of it is possible in a bright, cheerful, sanitary, comfortable place, with pleasant surroundings and outlook. Flowers, pictures, dining room, rest-room and even a player piano and occasionally a phonograph are some of the items in the equipment of many plants, and not for philanthropic reasons, but because these things pay dividends.

But there are practical, successful business men who have always harbored a more or less secret delusion that music is something to be tolerated in others and a frill for ones own family—a sort of outward badge of success. They have not thought of it as an efficiency builder.

Is Music Practical

Ninety per cent. of the school children of this country will never get beyond the public school. Their parents are sending them to school in the hope that what they learn will fit them to earn a livelihood and to become good citizens. Is a knowledge of, an interest in, or a love for music going to assist these children to better citizenship and to make a better livelihood? Will music in their lives make them better workmen and housekeepers?

In short, is music a practical subject?

Is it essential?

Most assuredly it is.

The boy or girl who has been taught to play the piano, organ, violin, guitar or any other instrument has a great advantage over the one who has not had musical instruction. He is quicker of eye, has more dexterous digits, can more readily connect up co-related subjects, has a wider, general knowledge and a more alert and facile mind. Instruction in music is a training in quick decision and prompt action.

Every office man knows that the most nimble stenographers are those who have learned to play the piano. Any man who works among machinery knows the value of an ear quick to detect variation in sound, and it was this fact that prompted a large engineering corporation, in advertising for young men to specify a preference for those who had received instruction in violin playing.

Why is it some automobile mechanics locate the elusive thump, grind, rattle or squeak in your car so much more quickly than others? Because of a more sensitive ear which may or may not be the result of training, but the man with the less sensitive ear would have been equipped to detect sound variations much more readily if he had not been denied his birthright of musical instruction of some kind.

A story is told of a certain lumber mill owner who was a regular customer of the man who specialized in repairing saws for the mills of the neighborhood. The latter asked the mill owner why it was his sawyer broke more saws than any other mill around. "Well," he thoughtfully replied, "I don't know unless it's because he has no darned ear for music." He couldn't tell from the sound of the saw whether it was cutting hardwood, softwood, or pig iron.

Influence on Morale

But this phase of the practicability of music, important as it may be, is merely incidental to its sphere of influence on workers collectively, on their morale.

Morale! What is it?

As a word, morale has become a very active unit of our vocabulary. What it stands for is something that was rather vaguely realized until the necessities of the war brought it out. One of Webster's definitions of morale is "condition as effected by, or dependent upon such moral or mental factors as zeal, spirit, hope, confidence, etc." or "mental state of a body of men, an army and the like."

That efficiency-mad nation so recently brought to its knees found the soldiers could march twenty-five per cent. more miles in a day with music and with less fatigue. One of the first acts of Sir Douglas Haig, when he took command of the British Army was to restore its bands. Why? Because of necessity for morale.

Example of Lloyd George

When, during the war, some of our bankers, economists and other theorists were decrying the extravagance of the people and urging, among personal and family retrenchments, the discontinuance of the purchase of musical instruments during the war, the Prime Minister of England was appealing to the people of Wales not to forego the great annual musical event, the Welsh Eisteddfod, as some thought they should do because of the war. Lloyd George, one of the greatest of the world's great men, in a public address, urged the people of Wales not to discontinue their great festival of Welsh literature and song. Referring to the soldiers, who were singing the songs of Wales in the trenches, he said: "There is not one of them who would not be sorry if we gave up our National Eisteddfod during the war. They want to feel that while they are upholding the honor of Wales on the battlefields of Europe, Asia and Africa, we are doing our best to keep alive all the institutions—educational, literary, musical, religious—which have made Wales what it is to them."

These economist preachers of ours did not tell us to discontinue our interest in good literature, school-books, pictures or flowers, because of war needs. One of the lamentable effects of the first year of the war was to interfere with

and in many cases stop altogether musical and other instruction being given to children, just at the formative period of their lives.

Soon our economist preachers began to realize that they didn't know what they were talking about in their references to musical instruments. From the soldiers in the training camps, in the trenches and in the hospitals came a constant, insistent demand for music. The men—and the men, women and children behind—found the need of their morale being jacked up. Music was the one thing to do it and music did it.

To this fact can very largely be attributed the music industries of Canada being able to survive the war as they did and surviving as an essential—not a luxury industry. Music had come to be reconized in the army as absolutely essential to winning the war.

Cabled for Musical Director

One of the first notable acts of General Pershing, of the American Army, was to cable from Europe for the most able musical director the United States could provide and who was promptly placed at the General's disposal. General Pershing was not merely desirous of entertaining the boys. He had bigger things than entertainment or amusement to consider. He had every battalion equipped with the best band of players that could be secured. "Sing-songs" with directors in charge were established in all training camps and the idea back of it all was morale—"to keep the fighter fit."

But what is morale in industrial life? Isn't it zeal, enthusiasm, confidence, dependability that employers ask of their workers? Do not employers proudly direct attention to the well-dressed, upright, clean-cut, bright-looking, alert employees. It is natural that the best results should come from workers in good physical and moral health, clean inside and outside, living and working in an atmosphere of good cheer.

The request of a firm of textile manufacturers for three professional musicians to whom good salaries were guaranteed prompted the writer to ascertain what the advertisement meant. It meant that the firm located in a Rhode Island town of about 2,000 inhabitants and the centre of a group of villages with a combined population of eight or nine thousand had decided that the quality and quantity of its products could be improved by the use of music.

Working on Commercial Basis

The firm in question was distinctly not doing welfare work, kept away from this as far as possible and even avoided the use of the word, nor was it expending surplus earnings nor gratifying a whim of the owner. On a purely commercial basis it set about getting the people of the community to maintain a musical activity in which it was willing to assist only to the extent of making the general plan economically possible. The main desire for the project was to come from the people themselves.

But why this active interest in music?

Let the answer come from the company itself. "In the present instance we are going to attempt to stimulate a musical atmosphere in our locality, with the expectation that the effort will justify itself economically from the broad general standpoint that all human beings bestow on their work the reactions from the influences to which they are daily subjected and the more interesting and happier our general community life may be, the better and more attractive will the goods which we manufacture and sell become."

Further inquiry discovered the fact that the firm above referred to had no monoply on its theories that quality of workmanship and quality of output could be improved by the employment of music.

The Robert Simpson Co., Ltd., of Toronto, introduced a morning sing of the employees, who took great interest in this daily event. The observation of the company concerning the innovation was—"very well patronized by the employees and seemed to be very much appreciated by everyone taking part in it. We believe it did tend to increase the efficiency of the staff in so far as it sent every one to their daily duty with a song in their heart."

Sears, Roebuck & Co., the well-known Chicago mail order house have an orchestra, a band, men's chorus and women's chorus, meeting once per week for rehearsals. They give noon concerts to the other employees and under the auspices of the Civil Music Association gave a series of concerts in different parts of the city during the summer of 1918. The expenses are taken care of by the firm. A committee of the men and women handle the music.

Just to forestall the reader who has a preconceived idea that music might be all right in factories where female labor is employed or men in clerical positions, but not practicable in factories employing men only, I mention the Chicago & Alton Railway Company, at Bloomington, Ill., where during the winter months the men in the shops held a sing every week. The superintendent reported that, "these gatherings were a fine success, as almost every employee attended each meeting. Music was furnished by an orchestra composed of the employees of the shop, and besides the community singing, solos, both instrumental and vocal, and lectures by various notables were enjoyed."

Overcomes Depression

A large American shoe factory, employing twelve thousand operatives found that the depressing influence of the monotony of the work was largely overcome with the aid of music.

To ascertain if possibly there were no Canadian enterprises as up-to-date as those of the United States, I wrote thirty letters to members of as many different kinds of industries asking if music either on the initiative of the firm or the employees themselves was used in any way to develop employees efficiency. The eight replies received were as varied in character as the industries heard from.

A firm of costume manufacturers have provided a piano in the rest-room and hoped in the near future to put on a daily sing song being quite in sympathy with the idea of promoting music among the employees.

Another firm placed a player piano in the lunch room which they believed was appreciated by the employees.

One of the most accomplished and best known bands in the country is maintained by Anglo-Canadian Leather Co., Ltd., of Huntsville, and has done as much to make Huntsville famous as has the products of the company's plant. The band is one of fifty members, conducted by Herbert L. Clarke, a celebrated cornetist, a Canadian and who for many years was soloist with Sousa's band. This band played a three-days' engagement at the Canadian National Exhibition of 1918, and received a tremendous ovation. The band, which is maintained by the company, is considered an advantage to the company, to the employees and to the locality in general.

While not vouching for the authenticity of the following, the writer believes the statement to be correct. It was credited to the officer in command of a military camp in Virgina and was apropos of music in industrial life being discussed.

"We were just starting on the second one of the second group of buildings, which was to be identically like the first.

and we were anxious to rush it to completion. At the suggestion of a New York musician, who was in training there, we determined to try the 'music treatment.' I arranged to have one of the camp bands play for two hours every forenoon and two hours every afternoon, and to have it play lively tunes, preferably marches. The result was simply astonishing. I would happen around during the playing, and it was a real treat to see how the workers limbered up. They could not get away from the rhythm of the music. Men who would ordinarily walk slowly now stepped along at as lively a rate as schoolboys on a holiday; men who were driving nails could not get them in fast enough, and kept up with the band right on the note; all over the works it was rap! and tap! and bang! in time with the music. You never saw such hurry-up working in your life.

"Of course, it was to be expected that they would let down some when the band stopped, but when it started operations again the workers resumed their hurry-up pace, too. What was the result? This: The building in question was completed in twelve days' less time than the structure identically like it which the same workers had finished just before it.

"As an experiment, one afternoon, I asked the band to sandwich in a few funeral dirges and slow tunes. You should have seen how the work slowed up!"

It is not so many years since the employer who undertook to improve the physical and moral conditions surrounding his employees was regarded as a faddist. He soon proved the contrary and it has of course been found that the best workers are discriminating in their selection of a place to work and that the influence of environment is reflected in their efforts whether physical or mental. The necessity of efficiency is greater than ever it was, and in its development music is likely to have important recognition.

Peat Fuel Resources

Canada's Peat Bogs Cover 37,000 Square Miles and Contain Over Nine Billion Tons

In the bulletin entitled, "Peat as a Source of Fuel," by Eugene Haanel, Director, Mines Branch, issued by the Commission of Conservation, the following account is given of the peat resources of Canada:

"The total area of the Dominion of Canada overlain by peat bogs is estimated to be 37,000 square miles, and of this total area the known peat bogs of Manitoba, Ontario, Quebec, and New Brunswick, comprise 12,000 square miles, with an average depth of six feet. This is probably but a portion of the actual amount of this valuable fuel asset in existence in these provinces.

"One square mile of peat bog, with an average depth of six feet, will produce 774,000 tons of peat fuel, with a moisture content of 25 per cent. The 12,000 square miles will, therefore, contain about 9,300,000,000 tons of peat, having a fuel value of equivalent to about 5,400,000,000 tons of good coal. This calculation is made on the assumption that the total quantity of peat contained in the 12,000 square miles is suitable for fuel purposes. This assumption is not strictly correct, but is near enough to serve the purpose of illustrating the enormous potential energy stored in our vast peat deposits.

"Up to the present time the Mines Branch has located, delimited, mapped and investigated, as to depth, character, and quantity of peat available, for commercial exploitation as fuel or litter, peat bogs comprising approximately 175,000 acres. Of this total amount, published reports treat in detail about 140,000 acres, distributed as follows: Ontario, 25 bogs; Quebec, 12; Nova Scotia, 8; Prince Edward Island, 6; and 7 in Manitoba, making 58 in all. These bogs are estimated to be capable of producing 115,000,000 tons of fuel, and 10,500,000 tons of peat litter.

"Seven bogs within convenient shipping distance of Toronto are estimated to be capable of producing 26,500,000 tons of fuel, and seven bogs in the vicinity of Montreal could supply that city with 23,500,000 tons of fuel."

A Yearly Service Plan

Advantages for Firms Having a Considerable Number of Patent Applications Each Year

The importance of having a patent department in every up-to-date manufacturing organization has come to be a recognized fact. There are constantly new developments, new products, new methods of manufacturing, new improvements, and the progressive manufacturer feels that he should keep abreast of them. But the drawback in most cases to the installation of a patent department lies in the overhead expense. For the average manufacturing concern, the cost is too high. Fortunately this obstacle is not insurmountable. There is a way of getting round the difficulty, and that way has been provided by that enterprising firm of patent attorneys, Harold C. Shipman & Co., Ottawa. While Messrs. Shipman & Co. are quite prepared to do the everyday work assigned to them, they have made a new departure in offering to manufacturers what they call their yearly service plan. Under this arrangement they become virtually the patent department of each firm they undertake to serve and give them a year-round service on all matters affecting patents. They are probably the first attorneys to offer this yearly service, and already they have met with much success in securing clients.

Where they handle an entire patent service for a company, they are naturally more familiar with their methods and requirements than if they simply dealt with each case individually. Consequently they are in a position to study their methods more carefully and bring to their attention possible opportunities which come to their notice from time to time. The yearly plan also reduces the cost of the attorney work and leaves the firm at liberty to inquire for particulars of any patent matters at any time. All small matters that might result in infringements will be carefully attended to, that firms will be saved consequent inconveniences. It is undoubtedly a plan well worth consideration.

Another Industry for Hamilton

Carr Fastener Co. of Boston Will Establish a Canadian Plant at Once in Hamilton

The Carr Fastener Co., of Boston, Mass., reputed to be the largest manufacturers of metal fasteners in the world, have completed arrangements for the immediate establishment of a large Canadian branch of their industry in Hamilton, Ont. A two and a half acre site in the heart of Hamilton's manufacturing district has been purchased, and building operations are to be commenced at once. The Carr Fastener Co. is capitalized at a quarter of a million dollars, and the buildings to be erected will cost in the neighborhood of $100,000. The Canadian plant will give employment to upward of 200 hands almost immediately, and it is expected that this number will ultimately be increased to 400 or 500. The Carr Fastener Company are the manufacturers of the "Lift the Dot," "Durable Dot," "Veltex Dot," automobile fasteners, as well as the "Common Sense" and other lines. In addition to supplying the Canadian automobile and other trade from Hamilton, it is the company's intention to have its Canadian plant supply the export trade. Building operations are to be rushed and the company expects to be manufacturing in its Hamilton plant before December 1st.

Transportation Items

Service to Newfoundland

Halifax Shipping Company Puts on New Service from North Sydney to St. John's

The Transportation Department, C.M.A., has recently been advised by Messrs. Farquhar & Co., Limited, Halifax, N.S., that they have inaugurated a service, with the S.S. *Sable*, from North Sydney to St. John's, Newfoundland. The steamer sails every Saturday morning, carrying freight and passengers. Information in regard to passenger accommodation must be secured from Farquhar Trading Co., Limited, North Sydney, and applications for space for freight shipments must be made to Farquhar & Co., Limited, Halifax, N.S. Rates will be quoted on application.

Deliveries on Sidings in Terminals

G. T. R. to Adopt Same Regulations as C. P. R. in Montreal and Toronto Terminals

The Grand Trunk Railway has adopted the same regulations as those applying on the Canadian Pacific Railway at Toronto and Montreal, covering carload traffic received at these two points. As is generally known, the railways in Toronto and Montreal have divided their delivery facilities into what are known as "sub-terminals." For example, in Montreal there is Outremont, Place Viger, etc., and in Toronto, Parkdale, West Toronto, etc. All carload shipments consigned to Toronto are accordingly taken to Simcoe St., and all shipments consigned to Montreal to Place Viger on the C.P.R., and Bonaventure on the Grand Trunk. The new arrangement which has been in vogue on the C.P.R. for sometime requires that carload shipments must be consigned direct to the sub-terminal, where delivery is desired. For example, a shipment from John Jones, Kingston, to William Smith, located at the Don, should be shown on the bill-of-lading as "William Smith, Don," followed by the words "Toronto, Ontario," in brackets.

So that this matter may be quite clear the following example of a local freight waybill, which forms part of the Grand Trunk Circular No. 1590, "Instructions to Agents," is submitted herewith:

LOCAL FREIGHT WAYBILL

From Kingston, Ont.	To Don, Ont. (Toronto)	Date November 2, 1918	Waybill No. 1

Consignor, Connecting Line Reference, Original Car and Waybill Number and Point of Shipment.	Marks Consignee and Destination	No. of Packages	Articles and Classification. Conditions (O.R., C. R., Rel., Gtd., etc.)	Weight
Jno. Jones	Wm. Smith, Don ..... (Toronto, Ont.)	1	Car Oats	60,000

Copy of this circular may be secured direct from any Grand Trunk Agent or Division Freight Agent. A limited number is also being supplied to each one of the Division Secretaries of the Canadian Manufacturers' Association, located at Amherst, Montreal, Hamilton, Winnipeg and Vancouver. Copies may also be secured from the Head Office of the Association.

If shipments are billed merely to "Toronto" or "Montreal," they will be taken to the terminal which is considered by the Railways as Toronto or Montreal, and any deliveries to any sub-terminals will be charged for in addition to the rate. It is suggested, therefore, that all interested manufacturers in these two cities should give instructions to all those from whom they receive shipments, so that the goods will be properly billed, and thus avoid additional expense.

The Grand Trunk Railway has sent a copy of this circular to all its agents and advised connecting lines of these conditions.

Service to Belgium

Third Voyage of S.S. "War Beryl" to be made on or about September 10

The Canadian Pacific Ocean Services, Limited, announce that the S.S. "War Beryl" will commence its third voyage from Montreal to Antwerp on or about the 10th day of September. All arrangements as to space and rates on this vessel should be made to G. D. Robinson, European Freight Agent, 21 Board of Trade Building, Montreal, or J. R. Clancy, General Agent, C.P.R. Building, Toronto, who represent the Canadian Pacific Ocean Services, Limited.

Steamship Sailings

A Record of Vessels Sailing from Montreal During August and Early September

The following announcement of proposed sailings from Montreal is made by the Canadian Pacific Railway Ocean Services in Bulletin No. 15, issued August 1. It will be found useful by manufacturers who are engaged in export business.

Vessel.	LINE.	
TO LIVERPOOL.		
Minnedosa	C.P.O.S. Line	Ab't Aug. 13
Canada	White Star-Dominion Line	Ab't Aug. 13
Scandinavian	C.P.O.S. Line	Ab't Aug. 14
Metagama	C.P.O.S. Line	Ab't Aug. 15
Megantic	White Star-Dominion Line	Ab't Aug. 16
Melita	C.P.O.S. Line	Ab't Aug. 29
Rimouski	White Star-Dominion Line	Ab't Aug. 31
TO LONDON.		
Scotian	C.P.O.S. Line	Ab't Aug. 6
Willaston	Cunard Line	Ab't Aug. 10
Vardulia	Cunard Line	Ab't Aug. 23
Cornish Point	C.P.O.S. Furness Line (Furness)	Ab't Aug. 25
Tunisian	C.P.O.S. Line	Ab't Aug. 28
War Peridot	C.P.O.S.-Furness Line (C.P.O.S.)	Ab't Sept. 5
Mattawa	C.P.O.S.-Furness Line (C.P.O.S.)	Ab't Sept. 6
Dunbridge	C.P.O.S.-Furness Line (C.P.O.S.)	Ab't Sept. 10
TO ANTWERP.		
Glenspean	C.P.O.S.-Furness Line (Furness)	Ab't Aug. 7
War Beryl	C.P.O.S.-Furness Line (C.P.O.S.)	Ab't Sept. 10
TO GLASGOW.		
Saturnia	Anchor-Don. Line	Ab't Aug. 13
Corsican	C.P.O.S. Line	Ab't Aug. 23
Cassandra	Anchor-Don. Line	Ab't Aug. 23
Montcalm	C.P.O.S. Line	Ab't Aug. 29
Pretorian	C.P.O.S. Line	Ab't Aug. 30
TO AVONMOUTH DOCK (Bristol).		
Dominion	Dominion Line	Ab't Aug. 16
Vallaria	Cunard Line	Ab't Aug. 16
Monmouth	C.P.O.S. Line	Ab't Aug. 28
Sardinian	C.P.O.S. Line	Ab't Sept. 4
TO MANCHESTER.		
Manchester Corporation	Manchester Liners	Ab't Aug. 7
Manchester Hero	Manchester Liners	Ab't Aug. 17
Manchester Division	Manchester Liners	Ab't Aug. 30
TO HULL.		
Maplemore	Furness Line	Ab't Aug. 3
Norfolk Range	Furness Line	Ab't Aug. 13
Grampian Range	Furness Line	Ab't Aug. 18
TO LEITH.		
Cairn Gowan	Thomson Line	Ab't Aug. 3
TO DUNSTAN (Newcastle-on-Tyne).		
Cairnvalona	Thomson Line	Ab't Aug. 5
TO DUBLIN.		
Lord Antrim	Head Line	Ab't Aug. 10
Carrigan Head	Head Line	Ab't Aug. 15

TO BELFAST.

Milmore Head	Head Line	Ab't Aug. 24
Ballygally Head	Head Line	Ab't Aug. 30

TO ST. NAZAIRE (France).

Cape Corso	Can.-French Line	Ab't Aug. 25

TO HAVRE (France).

Lord Dufferin	Canadian-Trans-Atlantique Line	Ab't Aug. 4
California	Canadian-Trans-Atlantique Line	Ab't Aug. 7
Hudson	Canadian-Trans-Atlantique Line	Ab't Aug. 15
Wisley	Canadian-Trans-Atlantique Line	Ab't Aug. 30

TO BUENOS AIRES AND MONTE VIDEO.

Clan Skene	Houston Lines	Ab't Aug. 20
A Steamer	Houston Lines	Ab't Sept. 15

TO SOUTH AFRICA.
Cape Town, Port Elizabeth, East London, Durban and Delagoa Bay.

Benguela	Elder-Dempster Line	Ab't Aug. 25

TO AUSTRALASIAN PORTS.
Melbourne, Sydney, Auckland, Wellington, Lyttleton, and Dunedin (Port Chalmers).

Wangaratta	New Zealand Shipping Co.	Ab't Aug. 20

TO BARBADOS AND TRINIDAD.

Canadian Recruit	Can. Govt. Merchant Marine Ltd.	Ab't Aug. 5
Canadian Warrior	Can. Govt. Merchant Marine Ltd.	Ab't Aug. 26
Canadian Recruit	Can. Govt. Merchant Marine Ltd.	Ab't Sept. 16

TO KINGSTON (Jamaica) and Havana (Cuba).

Canadian Sailor	Can. Govt. Merchant Marine Ltd.	Ab't Aug. 6
Canadian Trader	Can. Govt. Merchant Marine Ltd.	Ab't Aug. 27
Canadian Sailor	Can. Govt. Merchant Marine Ltd.	Ab't Sept. 13

TO CHARLOTTETOWN, St. JOHNS, Newf'd.

A Steamer	Gulf of St. Lawrence Shpg. & Trading Co.	Ab't Aug. 11

Paper Exports Still Grow

For First Month of Fiscal Year Value of Exports Nearly Half Million Ahead of 1918

Canadian exports of paper, pulp and pulpwood for April, 1919, the first month of the new fiscal year, reached a total value of $5,598,128, as compared with $6,323,635 for the corresponding month of 1918, showing a decrease of $725,507. Paper exports alone made a gain of $473,186. The new classification adopted by the Dominion Bureau of Statistics shows that the month's exports of newsprint, the leading paper staple, amounted to 920,592 cwt., valued at $3,160,318, compared with 954,375 cwt., valued at $2,790,158, in April, 1918, indicating a smaller quantity exported this year, but at a higher price.

Exports of both chemical and mechanical woodpulp fell off this year as compared with last, the former by $926,508 and the latter by $266,230. Exports of pulpwood also fell off by $5,955.

Two explanations are forthcoming as to the decrease in pulp exports. The first is that the American demand fell off in November as soon as the war stopped, a number of the board mills closing down and some of the American pulp mills previously diverted to war manufactures resuming their output of pulp. The decline in the demand for Canadian pulp from these causes reached its climax in April, and since that month the tendency has been reversed, and exporters now report the demand equal to this period of a year ago.

The other explanation given is that some large American producers found themselves overstocked in the first three months of this year and marketed their product at the 1918 price, to the disadvantage of the mills selling at the higher prices prevailing this year.

The decrease in the export of groundwood is regarded as without significance, the American demand fluctuating with varying conditions, such, for instance, as the water supply at the American mills, which was favorable to home production in April.

The exports of paper in April, 1919, were divided as follows: United Kingdom, $121,317; the United States, $2,974,048; other countries, $534,873. Exports to the United Kingdom show a slight falling off as compared with April, 1918, the other classifications showing an increase. Next to the countries named, Australia was Canada's best customer for paper, exports to that country reaching a value of $330,488 for the month, New Zealand coming second with $53,957.

Our chief pulp exports went to the United States, Great Britain, Japan, and New Zealand, in the order named. The United Kingdom imported from Canada 24,509 cwt. of groundwood, valued at $36,233, during the month. Later returns will show a great increase.

Who Pays the Increased Wages?

Correspondent of the "St. John Globe" Points Out Reasons for the Steady Increase in Prices

In a recent issue of the St. John *Globe* there appeared the following letter, which sets forth very clearly some of the economic laws which are not much taken into consideration in these days of soaring prices and demands for higher wages:

To the Editor of the *Globe*:

Sir,—While labor recklessly rocks the boat by its demands for higher wages and shorter hours, the question arises, Who pays the increased wages? Is it capital or is it labor itself with capital as a go-between?

Capital, in making up the selling prices of its goods, figures the cost of the raw material, labor, overhead expenses, and adds a certain percentage to net it a profit. If raw material goes up in price or labor costs more, capital simply adds the same percentage, and it is immaterial what the raw material costs or what wages labor gets, providing the increases can be adjusted. Adjusting means shifting the increases on to the consumer. If the cost of raw materials or the wages do not advance the same all over the country then capital suffers, but eventually the extra cost falls on the consumer.

As the number of capitalists is small compared with the numbers of labor, the bulk of the burden must be borne by the latter.

Labor unions have tried to better conditions by demanding higher wages, but according to the evidence of several labor representatives before the Industrial Commission here conditions have not improved and that the working man was better off when he was receiving much smaller pay. If this is true, he was better off before labor unions existed.

When the big Pennsylvania coal strike was settled some years ago the miners got an increased wage, but who paid it? Coal went up a dollar a ton here and every working man who burned anthracite coal had to pay a dollar a ton more for his fuel. This shows how increased wages are paid. The carpenter or the plumber can demand his sixty cents or a dollar an hour, but the relief that this will give him from the high cost of living will only be temporary.

Labor, not satisfied with increased wages, demands shorter hours, which boosts the cost of living still higher. It burns the candle at both ends.

If labor took a practical view of the situation, and in abnormal times, instead of demanding shorter hours would work ten hours instead of nine, they would increase their wages and increase production without increasing the cost of the goods; in fact they would reduce the cost. Then, when conditions became normal, go back to shorter hours.

Another reason why the cost of living is speeding upward is we are getting too lazy. We have too many loafers. There is the corner loafer, the man who seldom makes a full week, and the man who loafs on the job. If every man did his share production would be wonderfully increased and prices would drop. When some industrial concerns report men as being fifty per cent. efficient is it any wonder prices are what they are? Farmers cannot get help and the workers have to pay extreme prices for their food because the loafers won't work. We hear a great deal about profiteering, but if it could be ascertained which has boosted the cost of living most, profiteering or loafing, I think profiteering would cut a poor figure.

When labor realizes that it is not working so much for the "Boss" as it is for its fellowman, it will give a better day's work; it will try and cut out mistakes, be more saving on material; take more care of its employer's equipment, and cut out the needless or wasteful costs that make every man's living cost more.

AN EMPLOYER.

Recent Trade Enquiries

A List of Enquiries Received from Various Sources including the Canadian Trade Mission, London; the Canadian Trade Commission, Ottawa; the Department of Trade and Commerce, Ottawa; and the Commercial Intelligence Department, C.M.A., Toronto.

Domestic

43. A manufacturers' agent in British Columbia is desirous of getting in touch with some firm that requires a selling agent.

Export Trade Enquiries

44. A firm in Greece is interested in importing all kinds of food products.

45. A firm of import and export merchants are interested in the importation of food products of all kinds and advise that they will be pleased to enter into commercial relations with Canadian producers.

46. Firm in France of twenty years' standing desire to enter into business relations with producers and exporters of stavewood to be used in cooper's trade.

47. We are in communication with a firm in London who are desirous of establishing business relations with Canadian manufacturers of office furniture and chairs.

48. An agent in London desires the names of Canadian manufacturers of toys and chairs other than Bentwood chairs, with a view to establishing business relations.

49. A firm of tool manufacturers in England desire to receive quotations on hickory pick handles.

50. A firm of import and export merchants of Cook Island are desiring to do business in British goods providing prices are right. They also desire to establish business relations with buying agents and packing firms in British Columbia.

51. An agent in France advises that he is interested in butter, cheese and salted meats.

52. A trading company in Costa Rica is interested in the purchase of general provisions, groceries and hardware, shoemakers' materials, leather and skins.

53. A firm of long standing in Liverpool desires to represent some Canadian manufacturers of glucose starch, chocolates and sweets for sale in England.

54. A purveyor for some large mines in Bolivia is interested in establishing relations with Canadian exporters of all provisions and such commodities as wheat flour, canned goods, etc.

55. An enquirer in Tunis is desirous of establishing business relations with firms who might buy the following products in Tunisia: Olive oil for the table, sulphide oil, bee's wax, honey, goat's hair, goat-skin, wools, linseed, hard and soft nuts, marjoram, caraway seed, coriander.

56. An agency in England, covering an area where Canadian goods are hardly known is desirous of getting into touch with Canadian producers who cater for the grocer, baker, confectioner and allied trades.

57. There is an opportunity to quote on portable houses of wood for the use of a Belgian colony in Uruguay. Three Belgian families recently arrived at Montevideo and are said to be the advance guard of what will become an important colony.

58. A Mexican firm has a large quantity of twine and manilla rope and would like to get in touch with some of the Canadian Manufacturers who would be interested in the importation of the said products.

59. A Canadian firm is seeking connections with manufacturers who are desirous of cultivating Russian trade.

60. A firm in Barbados is desirous of representing manufacturers in British Guiana and the West Indies.

61. A firm in Holland is interested in the importation of soft and hardwood, sawn and unsawn.

62. A printer in France has written asking to be brought into touch with Canadian paper manufacturers desirous of having an agent in that country.

63. Large importers in Greece, especially of wheat, flour and foodstuffs, wish to enter into relationship with manufacturers interested in this line in Canada.

64. A correspondent who has recently returned from four years' overseas service with the French army, is desirous of representing some of the large manufacturers seeking trade with France.

65. A correspondent, who has been twelve years in Canada, wishes to get in touch with firms requiring a representative in England.

66. A firm in England has had a number of years' experience in the hardware trade and can handle bulk articles, such as brass and iron wire, etc.

67. A correspondent in England is visiting Canada shortly and wishes to get in touch with manufacturers interested in opening up trade in that country.

68. A London company who are prepared to purchase large quantities of non-skid chains for motor car wheels, invite offers from actual Canadian manufacturers.

69. An old-established Scottish firm is desirous of securing agency of Canadian manufacturers of wood pulp of various kinds.

70. A firm in England, open to purchase label manilla paper in lots of ten tons, would be pleased to receive samples and quotations from Canadian manufacturers.

Boosting Thrift Stamps

Goodyear Tire & Rubber Goods Company Have Formed Thrift Societies at their Offices and Plants

Thrift societies in connection with the War Savings Stamp Campaign are being promoted by the Government. One plan is to have business houses of all kinds form local societies for the purpose of affording the individual employees an opportunity to loan his savings (even if they be as low as 25 cents per week) to the Government. This money which the individual invests promotes progress in Canada and therefore incidentally rebounds back to the individuals. On the other hand, the individuals who subscribe in this way to thrift or war savings stamps actually makes $1.00 in only five years for every $4.00 he invests. The man who has a family finds it a splendid plan to start the little ones saving. Nearly every one has many things for which they have to save—an insurance premium, taxes, or even clothes and the like, and while this is a convenient plan to save for such expenditures, at the same time the fact remains that "A man is worth what he has saved," so that a great many subscribers find it a mighty fine permanent investment.

It is remarkable the amount of money loaned the Government in this way. Perhaps one of the biggest societies of this kind is that of The Goodyear Tire & Rubber Co., who have a society in their head office at Toronto and a branch society in each one of the thirteen branches and two factories. Competition is so keen between them that six distinct methods are used in promoting the sale of thrift and war savings stamps by this company.

1. Each branch organizer gets the employees in his branch to request the paymaster to insert Thrift Stamps in his pay envelope.
2. Each organizer has always some stamps on hand ready for sale.
3. Each member of the accounting staff agrees to buy one Thrift Stamp for each error made.
4. Each organizer tries to sell a Thrift Stamp to each employee who is late in the morning.
5. Each branch society competes for first place in *The Goodyear Family News* report.
6. Each organizer promotes the idea of exchanging the interest on war bonds as they fall due.

Already the Toronto branch of the Goodyear Tire & Rubber Company alone have thirty-three subscribers out of a total of thirty-five employees. Altogether these thirty-three employees have agreed to buy 734 Thrift Stamps, subscribing $186 per month in this way.

If the average for the whole of the people were as high, imagine the progress Canada would make during the next decade.

Mr. Ewart G. Horne has been appointed manager of Lockwood, Greene & Co., of Canada, Limited, with offices in the Guarantee Company of North America Building, Montreal.

AMONG THE INDUSTRIES

Under this heading are published items of news of current interest concerning the activities of Canadian manufacturers. Information about changes of interest, enlargement of plants, and plans for future developments are welcome, and are published free of charge, provided they should not be properly classified as advertisements

***Items prefixed with an asterisk are based on official information received in each case from the companies mentioned. Other items, while secured usually from reliable sources, have not the same authoritative origin**

ALBERTA.

Edmonton.—The Massey-Harris Co. and the J. I. Case Threshing Machine Co. have recently taken out permits for warehouses here.

BRITISH COLUMBIA.

Burnaby.—The first rubber manufacturing plant to be established in Western Canada will probably be located on Kingsway in Burnaby, B.C., according to a delegation which has waited on the Municipal Council of Burnaby asking certain concessions. Special water rates and other concessions will be granted. An agreement between the Municipality and the new company is now being drawn up. The company is known as the Alexander Cunningham & Gregory Tire and Rubber Co.

Courtenay.—A $25,000 extension to the condensed milk plant of Kelly, Douglas & Co., Vancouver, is contemplated.

South Vancouver.—Gregory Tire & Rubber Co. have selected a site for the erection of a tire factory.

Vancouver.—The Electrical Manufacturing Company have taken out a permit for the construction of their new factory building on Granville Island. The estimated cost is $5,000.

The Cal-Van Products, Ltd., has secured a Dominion charter with a capitalization of $100,000 and head office in Vancouver. Under its charter the company can operate markets anywhere in Western Canada.

Industrial building permits recently taken out include one issued to Vernon & Buckerfield, Front Street, for a $3,500 grain elevator, and to M. Wagstaffe, Kingsway, for an $1,800 machine shop.

The Fraser Valley Dairy is building an addition to its Vancouver plant, which is to cost $6,500.

MANITOBA

Winnipeg.—Gordon, Ironside & Fares will construct an addition to their present plant. Estimated cost, $10,000.

The Maple Leaf Milling Co. are remodelling some of their fifty elevators situated in the West.

The Burgess Battery, Ltd., have opened a factory at 701 Wellington Ave., for the manufacture of dry cell batteries. The head office of this Company is at Madison, Wis. L. R. Baker, who was formerly associated with the Canadian Dry Cell Co., has been engaged as manager of the new plant.

NEW BRUNSWICK

Chatham.—H. W. Mobbs, of Kettering, England, president of the largest last company in the United Kingdom, is looking into the prospect of starting a last-making industry on the Miramichi. If they can get the stumpage at reasonable rates they propose to establish mills to handle 3,000,000 feet of lumber. This would be sawn, shaped and seasoned, leaving only the final operations to be done in England. The lumber required is rock maple.

NOVA SCOTIA

Bear River.—Work has started on the new pulp mill being erected by Clarke Bros., Limited. The buildings will consist of a pulp mill, saw mill, boiler room and machine shop.

Halifax.—The Alaska Bedding Co. of Montreal may erect a factory here. An abattoir is planned by the Maritime Stock Breeders' Association.

Sydney.—A contract for 250,000 tons of ships' plates, involving five years' work and the completion of the erection of a large rolling plant at Sydney, N.S., costing in the vicinity of five millions of dollars, was let recently to the Dominion Steel Company by the federal government, according to an announcement by Hon. C. C. Ballantyne, Minister of Marine.

ONTARIO

Amherstburg.—It is reported that the plant of the Brunner Mond Company has been closed down, to stay so until labor conditions become such that business can be carried on. The plant, which is a subsidiary of the Solvay Process Co. of Detroit and Syracuse, is the largest in this country. Several hundred men are affected by the unexpected development.

Arnprior.—Two additions will be made to the factory of the Arnprior Cabinet Co., Limited. Alterations will be made to F. C. Hyck & Son's factory.

Brantford.—An electric tin smelting plant will be established on property adjoining that of the Verity Plow Co.

The Cockshutt Plow Co. will make extensive additions to their plant. Estimated cost, $100,000.

The Brantford Roofing Co. has commenced construction of an extension to the boiler plant. Estimated cost, $5,000.

The Brantford Scale Co. has awarded a contract for erection of an addition to their present plant. Plans are being prepared to double the capacity of the plant by further additions.

The Cockshutt Plow Co. has commenced construction of an additional storage warehouse, estimated cost, $9,500, and an experimental building, estimated cost, $15,000.

The United Portland Cement Co., Ltd., has been incorporated with head offices at the town of Brantford, to manufacture and sell Portland Cement. The stock of the company is $200,000, divided into 2,000 shares of $100 each.

Electric Tin Products Co. contemplates erecting factory.

Chatham.—The Canadian Des Moines Steel Company, which has the contract for the construction of eight wireless towers in France, received about a hundred applications in answer to their advertisement for riveters, etc., for this work. The work to be done is 820 feet in the air.

Collingwood.—The firm of Edwards & Co., industrial brokers of Toronto, have given the Chamber of Commerce a written statement that if they succeed in financing the proposed industry for the manufacture of hard rubber goods, the industry will be located in Collingwood. Mr. Duff, of Edwards & Co., is selling stock in the proposed industry in Collingwood and the district.

Cooksville.—The Shale Brick Company of Canada, Limited, Toronto, announce they are now operating their plant at Cooksville, Ont., formerly owned by the Ontario National Brick Company, Limited.

Dunnville.—Canadian Engines, Ltd., manufacturers of stationary and portable gas and gasoline engines, grain grinders and saw frames, who were practically closed down during the war, have resumed operations, and are taking on a full complement of men. They report an abundance of business in view and that the prospects are favorable for a busy time throughout the year.

Elmira.—Great West Felt Co. has awarded contract for the erection of a $25,000 factory, to W. Hallman, Galt.

Fergus.—Beatty Bros. plan extensions to their factory to cost in the neighborhood of $35,000.

Galt.—The R. McDougall Co., Ltd., were not seriously inconvenienced by the fire which took place in their plant recently. The machine shop and foundry were uninjured, and the patterns that were burned or injured have been largely replaced. Their deliveries on their usual lines have not been interfered with.

The Galt Brass Company, Limited, have been incorporated with an authorized capital of $500,000 to take over the liabilities and carry on the business of the Galt Brass Company Limited, Galt. They expect to develop and expand the business considerably. The old company was incorporated under a provincial charter, while the new concern has obtained a Dominion charter.

Canada Last Co., of Toronto, has purchased the works of the Preston Chair Co. from the corporation of Galt. The company went into liquidation, owing the municipality the sum of $19,153, and the price paid the corporation by the Canada Last Co. was $21,000, which clears the town of any loss. The new owners will spend a considerable sum in improving the property, and will employ from forty to fifty hands.

Georgetown.—H. Corke & Co., Ltd., have been incorporated with a capital stock of $100,000, divided into 400 shares of $25 each, to carry on the business now carried on by H. Corke & Co., Georgetown, manufacturing woollens and cottons.

Goderich.—The Convertible Tractor Corporation, of St. Paul, Minn., contemplates the erection of a manufacturing plant.

Guelph.—Letters of incorporation have been issued to Charles Lawrence Dunbar, Leo William Goetz and others to acquire the business of oxyactylene welders and machinists formerly carried on in Guelph by R. B. Lang and John Skidmore, and to do business under the style of the Lang Manufacturing Company, with a capital stock of $40,000.

Contracts have been let by the Lang Manufacturing Co., of Guelph, for the erection of a new machine shop to be built on the Harris St. side of their present factory. This is necessary owing to the expansion of their business, which is increasing at a rapid rate. The firm, which conducts a general machine shop business, purpose taking up other lines when they have the new premises available.

Hamilton.—The Garson Brush Co. have let contract for a $6,000 addition to factory.

The Acme Stamping & Tool Co. are making an addition to their plant.

The Dominion Foundry Co.'s plant was closed down for two weeks in July while electric ovens were installed. It is reported that the company intends to operate rolling mills in the course of a couple of months.

A company has been incorporated with a capital stock of $24,000, divided into 240 shares of $100 each, and known as the Canadian Type Registering Scale Co., Ltd., with head offices at Hamilton, to manufacture scales and type registering devices.

Contracts have been let in connection with the erection of an addition to the factory of the Mercury Mills, Limited.

Hanover.—Hanover Portland Cement Co. plans remodelling plant and installing additional equipment.

Hepworth.—A new glove factory may be located here, with natural gas as the motive power.

Ingersoll.—The Royal Broom Co. will start operations as soon as the necessary repairs are made to factory.

Kitchener.—A new packing plant and abattoir will be erected on Guelph St., by Dunlart Bros. Estimated cost, $75,000.

The Lang Tanning Co. proposed to make a considerable addition to their plant. This will consist of two buildings each 100 by 200 feet, four-storey brick construction. The present staff, which numbers about 200, will be increased to 300 and possibly more when the new buildings are ready.

The Canadian Consolidated Rubber Company will spend $1,000,000 on improvements and additions to their plant for the purpose of increasing their output.

The Dominion Tire Co., 149 Strange St., will erect a $150,000 addition to their factory.

The F. W. D. Auto Co. will commence construction of their new factory in the east end of the city as soon as they receive definite information on the new location of the Grand River Railway. J. Cotton, Clintonville.

Leamington.—The Imperial Tobacco Co., 900 St. Antoine St., Montreal, have awarded contract for a $125,000 factory here to a firm of Toronto contractors.

London.—An addition will be made to the factory of W. A. Jenkins & Co., Ridout and King Streets, and a contract has been let for the purpose.

The C. S. Hyman Co., tanners, will erect new building on George St.

A $500,000 factory for the Republic Motor Truck Co., Alma, Mich., is contemplated.

Contract has been let for a $250,000 factory for the Holeproof Hosiery Co. of Canada, Limited.

An addition costing about $80,000 will be made to the factory of the Murray Shoe Co., Limited, Richmond Street.

Niagara Falls.—Hamilton Lindsay, Alexander Winton, George Hayes Brown and others of Cleveland, Ohio, have incorporated the Niagara Wire Weaving Company with place of business at Niagara Falls, and a capital of $220,000, for the purpose of manufacturing wire cloth.

Oshawa.—The Canadian Stewart Co. have been awarded the general contract for the million dollar plant of General Motors of Canada, Limited. This will include assembling building, four storeys, 80 x 40, reinforced concrete construction; shipping building, 200 x 80; storage building, 800 x 80, 4 storeys; enamelling building, 300 x 80, 3 storeys.

Paris.—Charles E. Wheeler & Son, are putting in an equipment of all kinds of different types of machines to manufacture Banner and Scott & Williams type of needles and also double hook needles. When completed, this firm will have machinery enough to turn out in the neighborhood of half a million needles per month. This quantity of course includes their other types of latch needles which they are manufacturing in all gauges. They expect to employ approximately one hundred and twenty-five hands. The equipment will be in within three months and will be producing solid butt needles at that time, thus doubling the capacity of the plant.

Peterboro.—The Albion Knitting Co. plans alterations to its factory.

Picton.—A new factory will be built by Kinney & Colliver on Barker St.

Port Colborne.—It is expected that tenders will be called soon on a potash recovery plant worth $150,000 for the Canada Cement Co.

St. Mary's.—Mills are to be erected by the St. Mary's Milling Company.

Sarnia.—The Premier Paper Products, Ltd., have been incorporated with head offices at Sarnia. The capital stock will be $650,000 in 500 shares of $100 each. The object of the company is to manufacture and deal in paper cardboard and other products of paper or pulp, and engage in a general lumber business.

Sault Ste. Marie.—The extension of the rail mill of the Algoma Steel Co.'s plant, which was announced several weeks ago, and which will cost several hundred thousand dollars, is but the beginning of an extensive development of the plant, it is stated. The whole plan laid out by the officials of the company involves an expenditure of from five to seven million dollars, and includes the production of structural steel shapes of all kinds and sizes.

Sharbot Lake.—A creamery will be erected here by the Belleville Creamery Limited, 118 Front Street, Belleville.

Strathroy.—R. M. Pincombe of Strathroy has purchased the property belonging to the estate of the late John Mills, adjoining the G.T.R., and will erect a flour mill having a capacity of 250 barrels per day. The mill will be operated by hydro power, and be thoroughly up-to-date in its equipment. The grain elevator will be moved from its present position to a site adjoining the new mill.

Thorold.—The expenditure of a sum of $2,500,000 is contemplated by the Beaver Wood Fibre Company in the expansion of the Thorold plant, as well as building a duplicate of the Ottawa plant to take care of the increased Canadian and export business.

Toronto.—The Jefferson Glass Co. are planning to make certain extensions to their plant.

The Canada Petroleum and Refining Co. has been incorporated with head offices in Toronto. The capital stock of the company is to be $2,500,000, divided into 2,500,000 shares of $1 each, and the object of the company is to carry on a general business in crude petroleum and its products.

Small additions are being made to the plant of the Wm. Wrigley, Jr. Co., on Carlaw Ave. and A. R. Clarke & Co. on Eastern Ave. Brown's Bread Limited, will make addition to bakery at 462 Eastern Ave. Alterations and an addition will be made to the factory of the Toronto Carpet Mfg. Co., 1179 King St. W.

The Anthracite Briquette Company will start building immediately on the new industrial site of the Toronto Harbor Commission a factory for the making of compressed anthracite briquettes. Large supplies of waste anthracite have been secured, and the plant will have at first a capacity of ten tons per hour. The rights of a patented binder have been secured from the United States. The use of these briquettes will, it is claimed, make a big saving in the cost of fuel.

The Blatchford Calf Meal Co., of Waukegan, Ill., is establishing a factory in Toronto, and will operate under the name of Blatchford Calf Meal Co. of Canada, Ltd. J. W. Barwell, president, Waukegan, Ill. Details regarding the Canadian plant are being arranged by the company's vice-presidents, W. L. Blows and H. C. Burnette, Waukegan, Ill.

The John Wood Manufacturing Company of Conshohocken, Pennsylvania, have purchased the plant of the Holden-Morgan Thread Miller Company on Coxwell Avenue, Toronto, comprising three and three-quarter acres, with two large mill buildings and several smaller ones, and will engage in the manufacture of welded range boilers, storage tanks, gasoline tanks and similar goods. It is their intention to begin work as speedily as possible, and they expect to be in production early in September.

Contracts have been let for a $50,000 plant for the Anchor Cap and Closure Corporation of Canada, 50 Dovercourt Road.

Walkerville.—The American Auto Trimming Co. will erect a five-storey addition to their plant at a cost of about $160,000.

The Peabody Manufacturing Co., Ltd., will erect a $500,000 textile plant here.

Windsor.—Plans have been prepared for a factory to cost about $30,000 for B. N. Marsh.

QUEBEC

Clarke City.—The Gulf Pulp and Paper Co., Ltd., will soon erect addition to plant.

Montreal.—The Laval Industrial Co. contemplates the erection of stamping works to cost $25,000.

The Dominion Oilcloth Co., 1192 St. Catherine St. E., has awarded the contract for a $30,000 warehouse to J. Meloche, 1911 Masson St.

The Anglo-American Wire Rope Company, Montreal, has been incorporated with a capital stock of $200,000 by Alexander Chase Casgrain, Errol McDougall, Leslie G. Bell and others to manufacture wire and wire products. Supplementary letters-patent have been issued authorizing the change of title to the "Anglo-Canadian Wire Rope Company, Ltd."

The United States Rubber Co., of Canada, Ltd., has been incorporated with a capital stock of $20,000,000, divided into 200,000 shares of $100 each, the head office to be in Montreal. The company will manufacture and deal in all kinds of rubber goods. The principals are Alexander Chase Casgrain, Errol Malcolm McDougall, Leslie Gordon Bell, Sadie Conrad Demers, and Edward James Waterson.

Contract has been let for a $12,000 foundry building for Canadian Steel Foundries, Limited.

Contract has been let by the Tetrault Shoe Mfg. Co. for a factory building costing $85,000.

Smardon Shoe Co., Ltd., 533 Visitation St., is having plans prepared for a factory. Work expected to proceed within a month.

Milton L. Hersey, Henry H. Vaughan, Walter A. Jannsen and others have taken out letters of incorporation as the General Combustion Co. of Canada, with headquarters at Montreal, with nominal capital of $100,000, with the intention of manufacturing electric furnaces and electric heating devices, etc.

The recent reorganization of the St. Lawrence Welding Co., of Montreal, places the control of the company in the hands of W. H. Barry and A. M. Barry, president and general manager respectively; F. E. Fox being appointed a director and secretary-treasurer. L. E. Moulton is also a director of the new firm. The plant here has been enlarged and a well-equipped machine shop added to carry out the complete repairs of all welded work. A staff of boiler makers is, likewise, a part of the new organization. Every class of welding work is carried on and the firm make a specialty of oxy-acteylene and electric welding repairs. They have recently purchased a new portable electric equipment for operations between Halifax and Montreal. During the present season a brisk business has been carried on, considerable repairs having been performed to the troop ships entering Halifax.

Maisonneuve.—The Anglin Norcross Co., 65 Victoria St., Montheal, has been awarded the contract for $20,000 warehouse for the United Shoe Machinery Co.

Quebec.—Plans are being prepared for a $500,000 factory for the Marceau Oil Cloth Co.

St. Hyacinthe.—The Casavants Phonograph Co. plans extensive alterations and additions to factory.

St. Lambert.—Contract has been let by the L. E. Waterman Co., Limited, for $100,000 factory and office building.

Sherbrooke.—Contract has been let for a factory to cost $50,000 by the Dominion Cartridge Co., Limited.

Three Rivers.—The Three Rivers Shipyard Co., have started work on a new machine shop on Notre Dame St. Frame and brick.

SASKATCHEWAN.

Melfort.—The Saskatchewan Co-operative Creameries, Limited, are erecting a $50,000 creamery here.

Regina.—A warehouse costing $75,000 will be erected here by the Goodyear Tire & Rubber Co. of Canada.

Saskatoon.—Contract for the new elevator for the Quaker Oats Co. has been awarded to the Leonard Construction Co. It is to be of reinforced concrete throughout, and construction will commence about August 1st.

Blocks of Electrical Power Available For Sale in Canada, January 1, 1919

FROM

Census of Electric Power Stations

Prepared by Dominion Water Power Branch of the Department of the Interior in co-operation with the Dominion Bureau of Statistics.

BRITISH COLUMBIA

Company or Municipality.	Address.	Primary power.	Block of power for sale.	Rates.	Accessibility to Transportation.
Kamloops (Municipality)	Kamloops, B.C.	Water	1,000 h.p.	1 to 2c. per k.w. hr.	Adj. to C.P. Ry. and C.N. Ry.
Kelowna (Municipality)	Kelowna, B.C.	Fuel	250 k.w.	4 to 9c. per k.w. hr., disc., 33⅓%	Adj. to Okanagan lake, navigation.
Nelson (Municipality)	Nelson, B.C.	Water	1,000 k.w.		Adj. to C.P. Ry.
Revelstoke (Municipality)	Revelstoke, B.C.	Water	350 k.w.	⅛ to ¾c. k.w. hr.	Adj. to C.P. Ry.
Salmon Arm (Municipality)	Salmon Arm, B.C.	Fuel	70 k.w.	8 to 16c. k.w. hr.	Adj. to C.P. Ry.
Spence's Bridge Electric Light & Power Co.	Spence's Bridge	Water	150 h.p.		Adj. to C.P. Ry. and C.N. Ry.
Western Power Co. of Can., Ltd.	Vancouver, B.C.	Water	7,500 k.w.	$12 to $20 per k.w.	Adj. to C.P. Ry., C.N. Ry., G.N, Ry., N.P. Ry. and ocean navigation.
Vernon (Municipality)	Vernon, B.C.	Fuel	400 k.w.	5 to 1½c. per k.w. hr.	Adj. to C.P. Ry.
British Columbia Electric Railway Co., Ltd.	Vancouver, B.C.	Water	54,200,000 k.w. hrs.	2 to ½c. per k.w. hr.	Adj. to Esquimalt & Nanaimo Ry., C.N. Ry., Victoria & Sydney Ry., ocean navigation,

ALBERTA

Calgary (Municipality)	Calgary, Alta.	Fuel	10,000 h.p.	2 to ¾c. k.w. hr.	Adj. to C.P. Ry., C.N. Ry., and G.T.P. Ry.
Calgary Power Co., Ltd.	Seebe, Alta.	Water	14,000 h.p.		Adj. to C.P. Ry,, C.N. Ry. and G.T.P. Ry.
Lethbridge (Municipality)	Lethbridge, Alta.	Fuel	1,000 h.p.	6 to 2c. k.w. hr.	Adj. to C.P. Ry.
Vermilion (Municipality)	Vermilion, Alta.	Fuel	200 k.w.		Adj. to C.N. Ry.

SASKATCHEWAN

Arcola Light & Power Co.	Arcola, Sask.	Fuel	100 h.p. day load.		Adj. to C.P. Ry.
Davidson (Municipality)	Davidson, Sask.	Fuel	100 k.w.	$2 per h.p. per month	Adj. to C.N. Ry.
Humboldt (Municipality)	Humboldt, Sask.	Fuel	150 h.p.	10 to 5c. per k.w. hr.	Adj. to C.N. Ry.
Kindersley (Municipality)	Kindersley, Sask.	Fuel	55 k.w.	12½ to 16c. per k.w. hr.	Adj. to C.N. Ry.
North Battleford (Municipality)	N. Battleford, Sask.	Fuel	400 h.p.		Adj. to C.N. Ry.
Regina (Municipality)	Regina, Sask.	Fuel	5,000 k.w.		Adj. to C.P. Ry., C.N. Ry., G.T,P. Ry.
Saskatoon (Municipality)	Saskatoon, Sask.	Fuel	1,000 k.w.	1 to 5.4c. per k.w. hr.	Adj. to C.P. Ry., C.N. Ry., G.T.P. Ry.
Swift Current (Municipality)	Swift Current, Sask.	Fuel	600 k.w.	5 to 2c. per k.w. hr.	Adj. to C.P. Ry.
Weyburn (Municipality)	Weyburn, Sask.	Fuel	150 k.w.		Adj. C.P. Ry., G.T.P. Ry,

MANITOBA

Neepawa (Municipality)	Neepawa, Man.	Fuel	50 k.w.	9 to 4c. per k.w. hr.	Adj. to C.P. Ry. and C.N. Ry.
The Pas (Municipality)	The Pas, Man.	Fuel	100 k.w.	9c. per k.w. hr.	Adj. to C.N. Ry.

NEW BRUNSWICK

Edmundston (Municipality)	Edmundston, N.B.	Water	150 h.p.	6c. per k.w. hr.	Adj. to C.P. Ry., Can. Govt. Ry. and Temiscouata Ry.
Richibucto & Rexton (Municipalities)	Richibucto, N.B.	Water	160 h.p.	6c. per k.w. hr.	Adj. to Kent Northern Ry.
The Eastern Electric & Development Co., Ltd.	Sackville, N.B.	Fuel	Power available for sale	10 to 3c. per k.w. hr.	Adj. to Can. Govt. Rys.

NOVA SCOTIA

Canada Electric Co., Ltd.	Amherst, N.S.	Fuel	300 h.p.		Adj, to Can. Govt. Rys. and Maritime Coal Ry. and Power Co. Ry.
Daley's Electric Light Plant	Digby, N.S.	Fuel	100 h.p.		Adj. to C.P. Ry. and Bay of Fundy navigation.
Nova Scotia Tramways & Power Co., Ltd.	Halifax, N.S.	Fuel	3000 h.p.	8c. per k.w. hr., 25 to 55% disc.	Adj. to C.P. Ry., C.N. Ry., ocean navigation.

ONTARIO

Company or Municipality.	Address.	Primary Power.	Block of power for sale.	Rates.	Accessibility to Transportation.
St. Lawrence Power Co., Ltd.	Cornwall, Ont.	Water	1,000 h.p. 6 p.m. to 6 a.m		Adj. to G.T. Ry., N.Y. & Ottawa Ry., C.P. Ry., St. Lawrence River navigation.
Stormont Electric Light & Power Co., Ltd.	Cornwall, Ont.	Water	100 h.p.		Adj. to G.T. Ry., C.P. Ry., N.Y.C. Ry., St. Lawrence navigation,
Dunnville (Municipality)	Dunnville, Ont.	Hydro	300 h.p.	$33 per h.p.	Adj. to G.T. Ry., and T.H. & B. Ry.
Fenelon Falls (Municipality)	Fenelon Falls	Water	275 h.p.	$10 per h.p.	Adj. to G.T. Ry. and Trent Canal navigation.
Kaministiquia Power Co., Ltd.	Fort William	Water	10,000 h.p.	$25 per h.p.	Adj. to Can. Govt, Ry., C.P. Ry. and Great Lakes navigation.
The Galetta Electric Power & Milling Co., Ltd.	Arnprior, Ont.	Water	300 h.p.	$20 to $25 per h.p.	Adj. to C.P. Ry. and G.T. Ry.
Hawkesbury Electric Light & Power Co., Ltd.	Hawkesbury, Ont.	Water	1,500 h.p.	$25 to $30 per h.p.	Adj. to C.P. Ry., G.T, Ry., C.N. Ry., Ottawa River navigation.
Kenora (Municipality)	Kenora, Ont.	Water	Power available		Adj. to C.P. Ry.
The Mattawa Electric Light & Power Co., Ltd.	Mattawa, Ont.	Water	150 h.p.		Adj. to C.P. Ry.
Orillia (Municipality)	Orillia, Ont.	Water	2,500 h.p.	$20 per h.p. to $15 per h.p.	Adj. to C.P. Ry., C.N. Ry., G.T. Ry,, Trent Canal navigation.
Parry Sound (Municipality)	Parry Sound, Ont.	Water	175 h.p., day and off peak load	$7 per h.p.	Adj. to G.T. Ry., C.P, Ry., C.N. Ry., Great Lakes navigation.
Pembroke Electric Light Co., Ltd.	Pembroke, Ont.	Water	1,200 to 1,500 h.p.	$18 per h.p.	Adj. to C.P. Ry., G.T. Ry. and C.N. Ry,
Renfrew (Municipality)	Renfrew, Ont.	Water	200 h.p.	$20 per h.p.	Adj. to C.P. Ry. and G.T. Ry.
Sauble Falls Light & Power Co.	Wiarton, Ont.	Water	50 h.p.	$12 per h.p.	Adj. to G.T. Ry. and Great Lakes navigation.

QUEBEC

The Amqui Electric Co.	Amqui, Que.	Water	300 k.w.	$30 per k.w.	Adj. to Can. Govt. Rys.
Coaticook (Municipality)	Coaticook, Que.	Water	100 h.p.	$20 per h.p.	Adj. to G.T. Ry.
Farnham (Municipality)	Farnham, Que.	Water	530 h.p.	$20 per h.p.	Adj. to C.P. Ry. and Cent. Vermont Ry.
Grand Mere (Muuicipality)	Grand Mere, Que.	Water	Power available		
Hull Electric Co.	Hull, Que.	Water	1,200 h.p. in May, 1920.	$15 to $20 per h.p.	Adj. to C.P, Ry., G.T. Ry., C.N. Ry., N.Y.C. Ry. and Ottawa River navigation.
The Ottawa & Hull Power & Manufacturing Co.	Ottawa, Ont.	Water	1,000 h.p.	$15 per h.p.	Adj. to C.P. Ry., G.T. Ry., C.N. Ry., N.Y.C, Ry. and Ottawa River navigation.
Basin Electric Light & Power Co., Ltd.	Montmagny, Que.	Water	50 h.p.		Adj. to Can. Govt, Ry. and St. Lawrence navigation.
Montreal Light, Heat & Power, Consolidated	Montreal, Que.	Water	Power available		Adj. to all railways entering Montreal.
Southern Canada Power Co.	Montreal, Que.	Water	Power available	$40 to $25 per k.w.	Adj. to C.P. Ry., Can. Govt. Ry., G.T. Ry., Cent, Vt. Ry., Que. Cent. Ry., B. & M. Ry.
National Hydro-Electric Co., Ltd.	Montreal, Que.	Water	200 h.p.		Adj. to C.P. Ry., Ottawa River navigation.
St. Jerome (Municipality)	St. Jerome, Que.	Water	250 h.p., day service	$35 per h.p.	Adj. to C.P. Ry., C.N, Ry.
Sherbrooke (Municipality)	Sherbrooke, Que.	Water	6,900 h.p.		Adj. to C.P. Ry., G.T. Ry., B. & M. Ry, Que. Cent, Ry., Maine Cent. Ry.

NOTE—FOR DETAILED INFORMATION APPLY TO THE COMPANY OR MUNICIPALITY CONCERNED

Canadian National Exhibition

In the forty-one years' history of the Canadian National Exhibition, it is reported that prospects were never brighter and it is felt that the million attendance record, which has not been touched since 1913, will inevitably be broken, particularly in view of the fact that H.R.H. The Prince of Wales has graciously consented to preside over the opening ceremonies and to remain in the city for three days, August 25th, 26th and 27th.

The setting for the reception to the Soldier Prince will have a truly khaki tinge. A captured German U-boat is expected, while housed in the Fine Arts Gallery will be Canadian War Memorials paintings, the art sensation of the world at the present time. These pictures constitute unquestionably the most artistic record of any country's share in the great war, and the most significant manifestation of artistic activity during that time.

The Canadian Government is, with the Ontario Government, co-operating to make the event a memorable one. It is intended to eventually establish a war museum at Ottawa, but as Canada has over 450 big guns, captured from the Germans in her possession, scores of aeroplanes and thousands of rifles, machine guns, and other souvenirs of the Great War, it will be impossible to house them all in one building, so it has been decided to distribute many of the large pieces to cities throughout the Dominion. Toronto has been selected as the distribution depot, and the trophies are being assembled here as they come from overseas. It is the intention of the Government to display the entire collection at the Canadian National Exhibition before the final allotments for the museum and various municipalities are made.

The forthcoming visit of the Prince who won such great popularity amongst the Canadian soldiers overseas has stirred every interest connected with the Exhibition to unprecedented efforts. The "festival" will extend over thirteen days and promises to reflect the national expansion and civic development, and will above all, endeavor to give expression to the victory spirit.

Important structural and other improvements for the benefit of exhibitors, recommended by the manufacturers' representatives on the Exhibition Executive were carried out during the past year, and further important extensions are contemplated.

Correspondence

Veterinary Biological Products

Toronto, July 30th, 1919.

Editor, INDUSTRIAL CANADA, Toronto:

In the July number of INDUSTRIAL CANADA there appeared an article by Mr. Lyman B. Jackes entitled "A Chance for a New Industry in Canada."

There are certain notable omissions in the article in question. In the first instance, the impression is conveyed that a very broad market for veterinary biological products exists in Canada, and that some of these products are not at present prepared in Canada. To be quite specific it is stated: "the material listed as tetanus antitoxin used for the treatment of tetanus or lockjaw in horses, sells for three dollars for five thousand units." This statement is only partially correct, in two essential particulars—tetanus antitoxin is manufactured in the United States and is imported into Canada and probably is sold at the price mentioned, but what is more to the point is that tetanus antitoxin is prepared in the Connaught Antitoxin Laboratories of the University of Toronto, and is sold for one dollar and a half for five thousand units, just one half the price mentioned by the author of this article.

The Connaught Antitoxin Laboratories were established in 1914. Complete laboratories and stables, erected on a farm in York township, a gift of Colonel Albert Gooderham, of Toronto, to the University, were opened by His Excellency the Governor-General in October, 1917. These laboratories prepare and distribute public health biological in every province in Canada and in Newfoundland.

Tetanus antitoxin is amongst the products prepared and distributed, and these laboratories constantly supply veterinarians at the price mentioned above. This product is used both in man and animals.

In conclusion, it is highly desirable for anyone who contemplates acting upon the advice of the writer of the article in your July number to more fully inform himself than he can possibly do by simply reading Mr. Jackes' article before launching forth in a field which is beset with many difficulties, which, to one not possessed of adequate technical training, are very serious indeed.

It would be a great pleasure for the Director of the Connaught Antitoxin Laboratories, University of Toronto, and the Pathologist, Health of Animals Branch, Department of Agriculture, Ottawa, to fully lay before anyone contemplating entering this field, the exact situation at present in Canada in regard to this question.

J. S. FITZGERALD,
Director, Connaught Antitoxin Laboratories.

Good Health and "Getting On"

By F. W. HARDING

What a subject for a Master Physician to write about, especially if he is a lover of his fellow man. One can only give to the world useful service in proportion to his capacity of brain and body. To give the most, both must be kept in the best condition, and one without the other is of small account; therefore, the care of the body is of prime importance. Its condition should be checked up just as you would an automobile. Unless the brain we possess is supported vigorously by the body, it cannot put forth its full power.

Our bodies compare very closely with a steam boiler and engine, for while they require coal for fuel, our fuel is food. With good coal, and with engine and boilers in good shape, we can get from the apparatus all that it was designed for, and so with men if the body is well and the food is right. Good coal supplied to a run-down engine and boiler fails of its best efforts; also poor coal with a good engine and boiler fails to give a good return. Just so with us, if our selection of food is poor and if it is not digested properly, the system becomes clogged and many evils result. The body must be tended carefully and never abused, if we want to keep it in condition for its purpose of supporting the brain.

Importance of Good Teeth

Our mouths are our furnace doors, and we have an apparatus therein similar to a coal-breaker, our teeth. Their office is to help prepare our food for assimilation. No one can be well with poor teeth. How important then that they be taken care of. Poor, decaying teeth are a real menace to our health, and there is no doubt that many promising careers have fallen short of fulfillment because of bad teeth. Not only does it prevent perfect mastication of food, but the decaying matter is absorbed into the system. Pus formed at the roots of teeth poisons our blood and causes many ills of which rheumatism is one. When the blood is bad our brains are not clear; they are sluggish and incapable of great or sustained effort. Get the teeth examined now and regularly at least every six months afterward.

The eyes are often an unsuspected source of trouble. Sick headaches, irritability and other nervous disorders are sometimes directly traceable to eye defects, although the defects may not be great. Go to the oculist and *find out* if you need help. You pay life insurance religiously for the benefit of your dear ones, but the dentist and oculist are your own physical insurance towards success, and of even more importance than the other. All of nature's channels must be kept free and clear. Avoid wet feet and even damp feet. Because the soles of your shoes are thick is no guarantee that they are damp-proof. Modern treatment of leather

FOR SALE: MANUFACTURING SITE, with Brick and Steel Building 100′ x 300′. Partly equipped. 7½ ton overhead Electric Crane 40′ span 100′ runway. 150 H.P. Corlis Engine. 300 H.P. Steam. Suitable for foundry, machine or boiler shop. Good central Ontario town. Lake and Rail shipment. Labor situation first class. A snap.

C. P. WILSON CO.

509 Lumsden Building TORONTO

thickens up a thin piece of leather like a sponge. Wear low rubbers unless slushy. Low ones do not "draw."

A well man is inclined to go beyond his capacity if ambitious, especially in brain work, and enroach upon his nerve reserve. Sleep is the great remedy for that. The lack of proper sleep tends to lethargy and irritability. Is it fair to yourself to hazard your chances of success in dissipation? It is not fair to your employer either, for his success, and yours as well, depend upon a fair return for the money he invests in your skill.

A man may have a perfectly well body, but a diseased imagination which has, by lack of control, become filled with evil thoughts; vanity, envy, malice, and a host of others of like character lodge in a mind willing to receive them. The actual effect of such thoughts is disastrous. Your face and eyes show that you have them, and you are not trusted. They are easily eliminated if you will do it. Pleasant thoughts stimulate mental and bodily activity, while bad ones send a message of discouragement from the brain down to the stomach, and if the message is bad enough it will actually prevent digestion, for there is a direct nerve connection; ask your doctor.

When all this is done we begin to like ourselves, and others like us better. We become successful in the greatest sense, for we become men, capable of trust and confidence. It may not result in great money-getting, but it ought to, for it points that way. At any rate we are likely to live longer and happier, and remain efficient to the end.

Two Bowser Publications

S. F. Bowser & Co., Inc., Fort Wayne, Ind., and Toronto, Canada, send out attractive folders illustrating and describing a number of the Bowser systems for handling oil, gasoline, etc. These include tanks, pumps, registering measures, etc. The folders are admirably illustrated and give at a glance a very good idea of the various machines. The advantages pointed out in the use of these products are the prevention of waste, both of material and of time, and the protection against fire or explosion.

C.C.M. Bicycles

From the Canada Cycle & Motor Co., Limited, comes a small booklet telling about the various C.C.M. bicycle models and parts. Each model and all the individual parts are clearly illustrated and described. In addition the booklet tells something about the company and its policy and pictures and describes the factory at Weston where C.C.M. bicycles are made.

Smoking in Factories

Danger of the Practice Discussed Before the State Industrial Commission in New York

An important hearing on fire prevention was recently held in New York City, before the State Industrial Commission. The danger of fire caused by smoking in factories was discussed by several witnesses. One authority made the suggestion that the regulations prohibiting smoking in factories be extended to 24 hours a day, so that an employee could not smoke until he left the building. This authority also emphasized the danger of fire caused by employees lighting cigarettes and cigars as they were leaving the factory, and carelessly throwing the lighted match aside. Discontinuance of celluloid eye shades was also advocated, because they were so inflammable. Several instances were cited where eyeshades had caught fire and the wearer had been severely burned. It was pointed out that eyeshades of this kind were not only a danger to the wearer, but to his fellow-workmen as well.



The Reminiscences of an old Time Recorder

HOW I Got My Job, WHAT I Did for My Employer in Fifteen Years, and WHY It Was to His Interest to REPLACE Me

AS TOLD BY AN OLD INTERNATIONAL RECORDER

Here is an article written by Frank E. Mutton, worthy of deep thought. You owe it to yourself and to your business to read and study it carefully.



Frank E. Mutton

ONE day a few weeks ago I had occasion to step into our shop. It was six o'clock in the evening, and I was alone. As I passed on through the Service Room I heard the tick-tocks of some twenty different Time Recorders, and I also heard the noise of the jumping of the hour wheels.

I was in a pensive, meditative mood, and it occurred to me that the noises I heard were the language of our Time Recorders. Suddenly I was able to understand them, so I stepped over to an old International Recorder, recently taken in exchange and replaced by a No. 111-AR International Dial Recorder. He was tick-talking as cheerfully and pleasantly as in the days of his youth. While his clothes were soiled and battered, his face was clean and bright, and his hands were as steady and strong as ever.

I asked him to tell me something about himself. He replied, "It took a good salesman, who worked very hard, a long time to get me my job. I worked steadily for over fifteen years in one factory. On the average, about 125 men and women used my services every working day during all those years.

"I helped all of them obey the rules. I taught all of them the value of Time. As soon as I got on the job I put an end to all pay-day disputes and I have always handed out a Square Deal to every one with whom I came in contact.

"During my full period of employment my conduct was above reproach. I worked faithfully every day and night. I played no favorites and I always told the plain, simple truth at all times. I helped the timekeeper, the foreman, the paymaster, the cashier and the auditor.

"It surely saddened my heart to submit to retirement, for even though I realize I am old fashioned, still, I liked my job; my work was easy for me, and I was well liked by everyone worth while. There were a few exceptions, of course, but they were people who had but little respect for themselves and for whom I had no respect at all. They simply would not obey the rules of business, and when I told the manager about them, he was, of course, forced to dispense with their services.

"A young brother of mine has taken my old job, and I am proud to say he is much more capable than I. He has had the advantages of a more modern and thorough education, and he can do many things in the way of saving time, money and work that I used to think could never be done. My old boss was much pleased to employ my brother, and so, after all, as long as a member of my own family is succeeding me I am perfectly satisfied to retire.

"In my fifteen years' service I have made over 2,812,000 original time records, and just think of all I have really accomplished, even with my old fashioned methods. I have accurately accounted for more than 5,062,000 hours, and I have fully protected an expenditure of more than $1,771,000.00.

"All my employer had to pay for this work, including my first cost and the maintenance expense for the full fifteen years, was a little less than $300.00. I know I have served my employer with great profit and full satisfaction to him, and I feel certain I have upheld the tradition of my ancestors with all honor and full credit."

I thanked the old International Dial for the interesting story of his career, and I then walked over to an old Bundy Key Recorder. He was so old and decrepit he could scarcely speak above a whisper. He told me he also had rendered many long years of faithful service.

He said he was one of the oldest members of the International family. He told me he had, in his own humble way, tried to start off his young relatives in the right direction, and even then it was very hard work in the beginning. He felt certain he had helped pave the way for the great success the younger generation is enjoying at this time.

Just then a brand new International Dial Weekly Recorder spoke up. He said: "I want you to take a message down to the Employers at large for us. I have been so anxiously awaiting this opportunity to express myself. I am just longing to tell all the people in my own words who we are, what we have done, and what we are continuing to do for the world's business.

"My older brothers have made me what I am, and I ask the privilege of being their spokesman. Ask the Employers to please accept this message from us, which, in short, is this—no matter what they charge you for us, we will remain the best employee you ever hired. The most constant, the most reliable, a creator of harmony and security, and my cost is—practically nothing—except to those who try to do without me—and then the cost is abnormal."

The International Creed

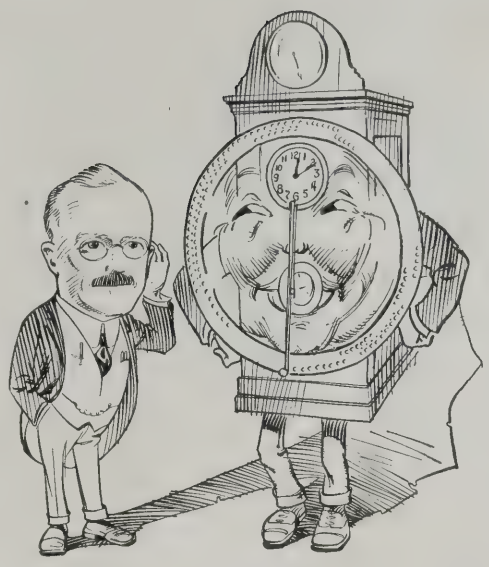
We are International Time Recorders—Servants of all peoples.

Our Ancestry dates back over Thirty Years.

We are Well Bred and Well Built for the tasks we perform.

We are the First of Our Race and have always been First in the Race of our Kind.

Our Policy is Progress—Our Creed is Punctuality—Our Mission is to promote the interests of every business and of every man and woman in business.



"I protected an expenditure of $1,771,000"

Our Ceaseless Service is Equalizing the Energies and Earnings of millions of workers in all lines of endeavor—Everywhere.

Our unbiased vigilance Protects the Worker and Corrects the Shirker—It transforms Idleness into Activity—It fills the Time Schedules of Commerce with Cheerful, Willing Co-operation—It Enhances the value of Time and Decreases the Cost of Labor by Increasing Production.

Our Duties are Righteous—Our Authority is Recognized.

In the true and unvarying language of the sun, we attest the Beginning and End of Effort and Achievement.

To ignore us is NEGLIGENCE—To doubt us is HERESY—To fear us is FOLLY—To trust us is WISDOM—to EMPLOY US IS SECURITY.

There is an International Time Recorder for every business where there are employees

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International Business Machines Co., Limited

(Time Recorder Division)

Head Office and Factory:
TORONTO, ONT.

Also at
Montreal, Winnipeg, Vancouver

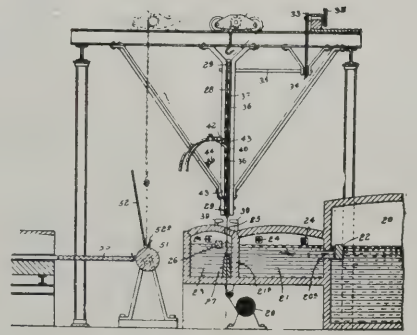
FRANK E. MUTTON
Vice Pres. and Gen. Mgr.

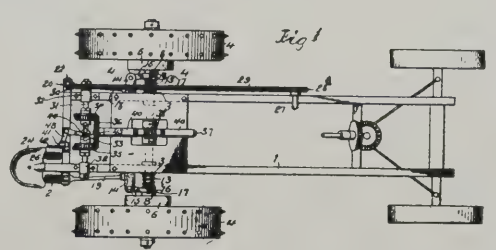
(We also make Dayton Scales and Hollerith Electric Tabulators)

PATENTS FOR SALE

Patent applications through
Harold C. Shipman & Co.
Patent Attorneys - Ottawa, Canada

METHOD OF SEPARATING AND DRAWING SHEET GLASS whereby the glass will be drawn directly from a mass of molten or plastic glass to eliminate the difficulties now found in forming sheet glass and decreases the cost of labor and time required. For further particulars, apply to Mr. Thos. H. Chadwick, Arnold, Westmoreland Co., Pa., U.S.A.

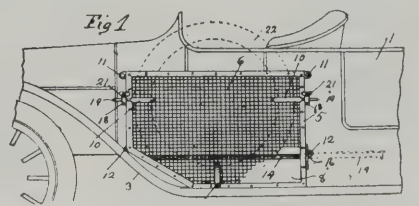




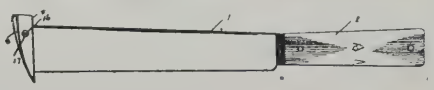
TRACTORS, specially constructed to operate on short turns, simple in construction, powerful and distributes the strain equally between the driving wheels. Can. patent rights for sale. Hillis A. Harrah, 1107 Broadway, Kansas City, Mo., U.S.A.

FOOD PRODUCT.—Miss Fannie E. Pierson, Gravity, Iowa, has recently invented a new form of corn product. The article is one which contains a very large amount of nourishment and food value, and has been mentioned by experts as being one of the best corn products ever offered for public use. For further particulars, apply to the inventor, who offers Patent Rights in Dominion for sale.

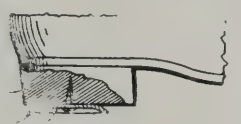
PARCEL CARRIER FOR AUTOS. This device provides a simple and efficient attachment, forming a combined tire, tool and baggage carrier in one. Can. patent rights are for sale by H. L. Biegert, Montevideo, Minn., U.S.A.



KNIFE GUARD adapted to be secured to the end of a butcher's knife, so that he may easily and quickly extract portions from the interior of an animal without fear of puncturing the intestines. Canadian patent rights for sale by Harry O. Sebring, Box 452, International Falls, Minn., U.S.A.



HEEL-PLATE designed to prevent slipping upon ice or other surface. This article may be worn at all times without detriment to smoothly polished floors, carpets or rugs. It is at all times free to rotate upon the heel and easily detached therefrom and readily applied when desired. Can. Patent rights for sale, Milton S. Campbell, 320 Water St. East, Elmira, N.Y.

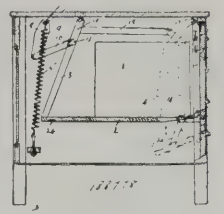


RAILROAD TIE HOLDER, embodying simplicity, cheapness, ease of application and efficiency in operation. The article is one in which every railroad company should be interested and the inventor, Mr. Oscar De Long, of Conesville, Ohio, U.S.A., is open to negotiations with a responsible company for the manufacture of this article in the Dominion.

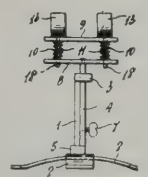


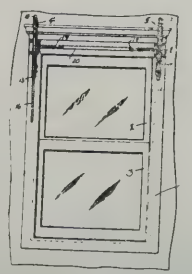
LUTING OR CEMENTING COMPOSITION for successfully mending copper, brass, agate, granite, nickle, and in fact all compositions of metal or crockery and is the first of its kind to be truly successful, and in view of the soaring prices of metals and the inferiority of utensils, its place as a necessity is assured. The inventor, Mrs. D. H. Reimuller, Rock River, Ohio, U.S.A., offers patent rights in the Dominion for sale.

DESK OR CABINET FOR DISAPPEARING TYPEWRITING MACHINE, having a new and improved method of raising or lowering the typewriter as desired which is obtained by having the parallelogram-shaped guides used for supporting the machine connected to the door of the case in which the machine is installed when not in use in such a manner that when the machine is raised the door moves backward under the supporting board of the machine in the case. Can. Patent rights for sale by Johannes Tacoma, N.Z., Voorburgwal 227-237 en 239, Amsterdam, Netherlands.



MILKING MACHINE, strong, durable, efficient in use, cheap to manufacture, and so constructed that it will not hurt or in any way injure the animal while in operation. For further particulars apply to Stephen B. Selleet, Pironyia Waikato, Auckland, N.Z.





CURTAIN SUPPORT, designed to support the curtain from being soiled as is now the case when the window is opened at the top or bottom. Patent rights in the Dominion are for sale by Mrs. A. E. Robert, 608 22nd St., Oakland, Cal., U.S.A.

HOOK which will effectively clasp an article to permit easy and quick connection or disconnection and guaranteed to prevent accidental detachment. Can. Patent rights are for sale by Eric Ericksen, c-o Anderson & Setters, 486 Commercial St., Rooms 3 & 4, Astoria, Ore., U.S.A.

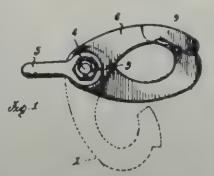
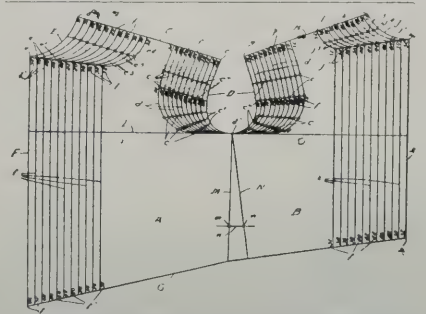
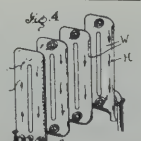


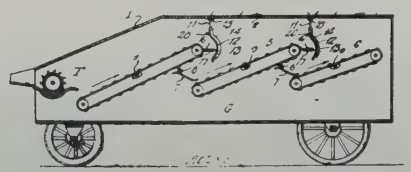
CHART FOR CUTTING GARMENTS.—A simple, practical and accurate means for garment-cutting. Will adapt itself to a perfect pattern of any present or future style. This chart is the result of many years of careful study of practical and accurate means of cutting, by an expert. For further particulars apply to S. G. Weiler, 89 Locust St., Milwaukee, Wis., U.S.A.



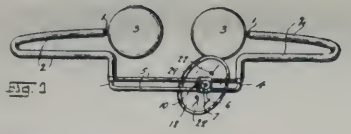
END SECTION FOR RADIATORS co-operating with the ordinary commercial type of intermediate sections and whereby the end section is so partitioned as to cause the heating fluid to be distributed throughout the radiator from the top portion thereof. For further particulars apply to Mr. H. Mullen,



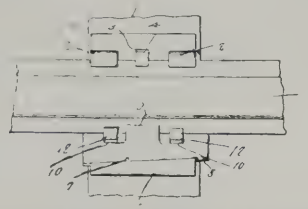
GRAIN SEPARATOR designed to separate a larger percentage of grain from the straw before the latter is delivered to the stacker. This is carried out by mounting beaters at the delivery end of the straw carriers, and suspending behind each beater a grate of peculiar construction. Can. Patent rights are for sale by Wilbert Maple, 915 W. Black-



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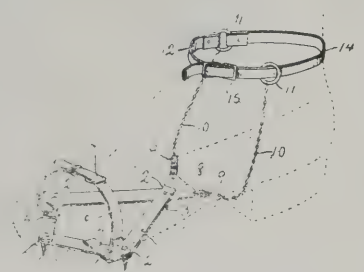
TRUSS, so constructed as to be capable of slight resilient movement and yield-ability in various directions, under ordinary bodily stresses without interfering with its normal compressing functions. Can. Patent rights for sale by Oscar A. Shipley, Rahway, N.J., U.S.A.



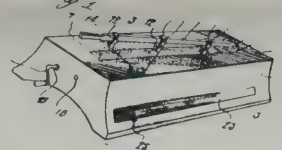
TIE-PLATE, designed to be associated with a rail-tie formed of wood so as to increase the life of the tie, said plate being equipped with novel and efficient means for securing the rail to same. Can. patent rights are for sale by John F. Wedgeworth, Sarepta, La., U.S.A.



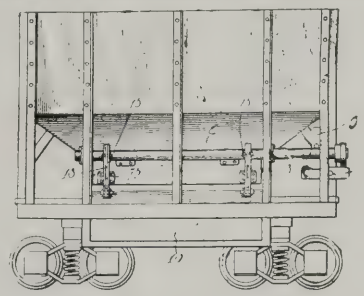
ADJUSTABLE WRENCH.—Easily adjusted by means of a tooth lever. This wrench can be adjusted to receive any type or size of nut, and is cheap to manufacture. Can. patent rights for sale by Mr. D. Forniraseo, Klamath Falls, Ore., U.S.A.



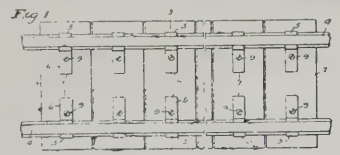
ICE CREEPER, designed for safety, comfort and guaranteed satisfaction. The article is made of spring steel, bends with the foot and fits any size or kind of shoe. Canadian patent rights for sale by the inventor, Mr. J. E. Ostrander, Strassburg, N.Y., U.S.A.



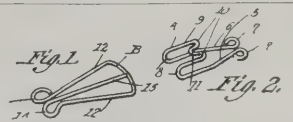
COMB CLEANER, having a novel means for holding the comb during cleaning operation, simple and efficient in use and owing to its daintiness and to the fact that it is a dressing table requisite should control a very large market. Can. patent rights are for sale by Ernest W. Mellien, Rogerson, Idaho, U.S.A.



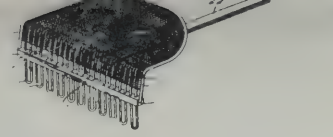
DUMP CAR which is simple, easily and safely manipulated, durable and easily repaired. Dumping arrangement will readily permit the dumping of contents of car upon either side. Patent rights are offered for sale by the inventor, Mr. Stanley Brown, 3106 E. 83rd St., Chicago, Ill., U.S.A.



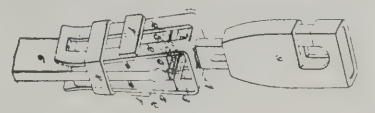
METALLIC RAILWAY ROADBED CONSTRUCTION, simple, durable, cheap to manufacture, efficient in operation and having associated therewith novel types of rail fastening elements which will effectively clamp the rails against spreading. Can. patent rights are for sale by Mr. Austin J. Stockwell, 1620 S. Burlington Ave., Los Angeles, Cal., U.S.A.



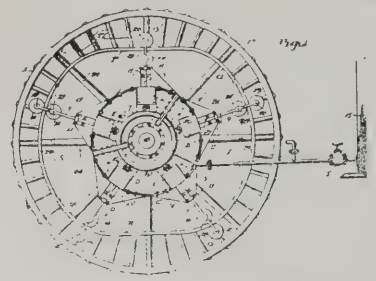
HOOKS AND EYES specially adapted for heavy garments such as fur coats, fur collars, also capes, scarfs, coats and the like, but may also be used upon other garments equally as well. Can. patent rights are for sale by F. J. Rappold, 1111 State St., Erie, Pa., U.S.A.



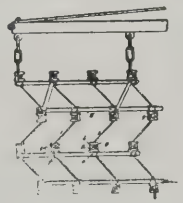
RAKE, having an improved attachment whereby the material that is raked together will be bunched in heaps instead of falling over the top of the rake, as is now the case with the ordinary lawn and garden rake. Patent rights in the Dominion are for sale by Mr. Ludwig Meuler, 205 Jefferson St., Oconomowoc, Wis., U.S.A.



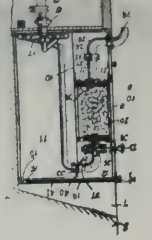
CLAMPING DEVICE, to effectively clasp an article, and being provided with arms longitudinally slotted and a pair of wedge-shaped gripping members held together, said clamping member being extended over the side so as to prevent slipping or accidental displacement. Can. patent rights for sale by Geo. L. Wallace, 1621 12th Ave., East Oakland, Cal., U.S.A.



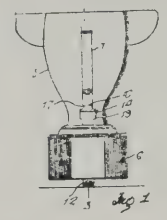
CAM ACTUATED PUMP.—This attachment may be readily installed upon a driven wheel such as a belt or fly wheel of an engine and adapted for service as an air compressor or other similar device with only a slight expenditure or loss of energy. Patent rights in the Dominion are offered for sale by Mr. David Oiler, Sr., 751 Helena St., Braddock, Pa., U.S.A.



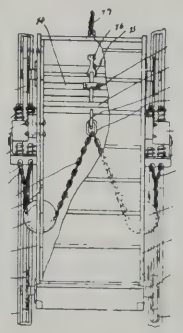
HARROW having a combined bar coupling and tooth clamping device of a simple and economical construction, by the use of which a new tooth may be conveniently applied without releasing the coupling connection. Can. patent rights for sale by Hans P. Johnson, 431 Water St., Racine, Wis., U.S.A.



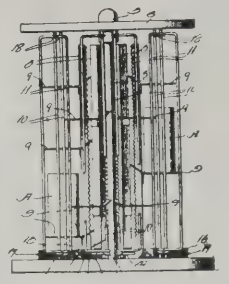
COOLER AND FILTER, guaranteed to insure cooling of a plentiful supply of water, and at the same time thoroughly filter same and means for preventing drippage from the dispensing spout. Can. patent rights are for sale by Harry T. Allen, Guilford, Conn., U.S.A.



CASTOR designed in such a manner as to enable the castor to be moved downwardly in the operation of moving the stove or other article from place to place and when same is at rest on the floor the castors will ascend within the base of the leg. Can. patent rights are for sale by Henry Walter, Sanders, Ohio, Box 43, U.S.A.



SAFETY GRIPPING MECHANISM FOR ELEVATORS, strong, durable, simple in construction, safe and convenient in use, readily set up and comparatively inexpensive to manufacture, adapted to mine cars, travelling upon an inclined track and controlled by a pulling cable and will in case of accident grip the rails to retard the movement of the car. Canadian patent rights are for sale by Ciril Fak, Box 161, Bush, Ill., U.S.A.

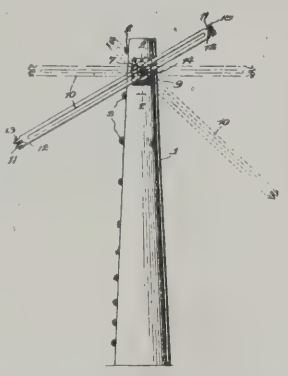


NOVEL DISPLAY CASE providing means for supporting the article to be displayed and guards for holding same in position with means for locking the case against rotation when any guard is disposed to inoperative position, thus preventing the goods from being accidentally thrown therefrom. Can. patent rights are for sale by A. A. Carter, Fayette, Iowa, U.S.A.

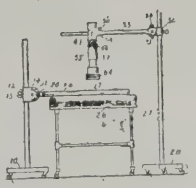
Manufacturers—Let us know what line of patents you are interested in, so we can send you copies from time to time.

PATENTS FOR SALE

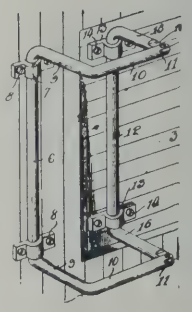
FENCE GUARD, designed to prevent stock from jumping over a fence and also to prevent them rubbing against the posts, thereby gradually pushing them over. Patent rights in the Dominion are for sale by Mr. Abraham W. Eikenberry, Flora, Ind., U.S.A.

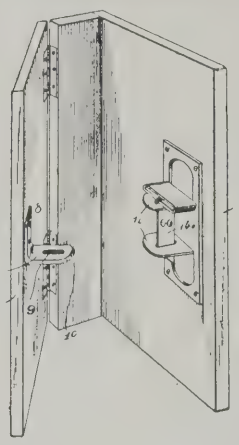


APPARATUS FOR APPLYING THERAPEUTICALLY ACTIVE RAYS TO THE HUMAN BODY for treatment of skin diseases and certain diseased organs. The rays can be applied to any particular part of the body, on account of the improved construction of the electrodes and the means for supporting them. Canadian patent rights are for sale by Ernest Zueblin, Cincinnati Tuberculosis Sanitarium, Cincinnati, Ohio, U.S.A.

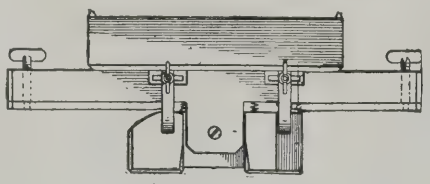


SILO DOOR HINGE, designed for permanently hinging silo doors in such a manner that the hinge is not exposed to the contents, thus preventing the dampness, which is in the silo, from rusting the hinge. Can. patent rights are for sale. William H. Lewis, R. D. No. 1, Westfield, Mass., U.S.A.

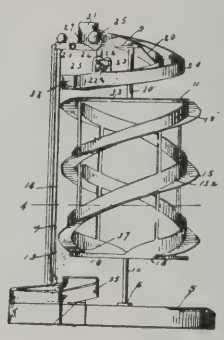




DOOR FASTENING MEANS, adapted to hold a door in a closed or open position. The article is simple in construction, cheap to manufacture, strong, durable and efficient in use. The inventor, J. P. Delamour, Melville, Sask., Canada, offers Can. patent rights for sale.

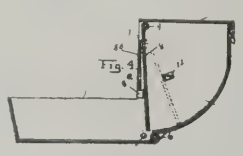


ADJUSTABLE SAW SETTING DEVICE, having means for adjusting both the degree of inclination and the length of the set to be imparted to the teeth, is capable of setting therewith cross cut, circular saws and the like. Can. patent rights are for sale by Frank W. Brown, 503 E. Center St., Belding, Mich., U.S.A.



TOY of simple design, cheap to manufacture, having an interesting mechanical movement controlled by a plurality of successively operating pieces or balls which are automatically fed. Can. patent rights are for sale by Fred Okel, 2904 McColloch St., Wheeling, West Va., U.S.A.

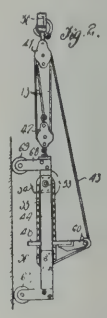
FOOD BOX for preventing animals from wasting fodder while eating, is simple in construction, durable and well adapted to stand rough usage. Can. patent rights are for sale by August Lindquist, R. R. No. 5, Box 38, Sisesston, S.D., U.S.A.



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DAVIT, adapted for use on boats such as are used on the Great Lakes. The article may be readily attached to or detached from the frame and may be used as a support for a painter's chart or other object. For further particulars, apply to Mr. Jerome H. Moran, steamer *Vega*, Marine Post Office, Detroit, Mich., U.S.A.



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Ignorance of shipping conditions and methods is responsible for the loss of millions every year. Goods are improperly packed; they are sent by the wrong routes and agencies not the best; the inspection of charges is neglected. This loss amounts to a considerable tax on the shippers and receivers of goods.

All this is because the shippers (or a large proportion of them) do not yet realize the importance of the shipping department or the need of a competent traffic manager.

A book has now been published in which the essential facts about this work are collected. It s called "The Traffic Field," and is the work of five experts: J. W. Cobey, traffic manager, National Cash Register Co.; Brunner Robeson, president, Robeson Company, Chicago; J. P. Haynes, traffic commissioner, Sioux City Commercial Club; J. H. Kane, formerly of the Illinois Public Utility Commission; and N. D. Chapin, formerly chief of Tariff Bureau, New York Central Railroad.

Here are some of the things made clear by this very practical book:

How to organize a traffic department.
The duties of a traffic manager.
Filing tariffs and other records.
Tracing lost shipments.
Reducing packing costs and freight charges.
Errors in freight bills.
Auditing freight bills and transportation costs.
Loss, damage, and overcharge claims.
Local transport.
Traffic graphs.
Development of trade with foreign countries.
Duties of an export manager.
Foreign shipments.
Community traffic management.
State commissions.
General relations of carriers and public.

"The Traffic Field" is published by La Salle Extension University, of Chicago, as part of its instruction material in interstate commerce and railway traffic.

The Digester Expands

The Digester, which is described in its headline as a fortnightly paper published under the auspices of the Laurentide Company, Limited, in the interests of the town of Grand Mere, Quebec, appears in greatly enlarged and improved form with its issue of July 9. It is now printed on calendared stock, is illustrated with halftones and extends to 16 pages of standard newspaper size. A new editor has been appointed in the person of Ben Deacon, an experienced and capable Canadian newspaperman, and altogether a new era has dawned for this interesting and unique publication. All the contents are now printed in both French and English, and there is little that happens in the town of Grand' Mere or round the big plant of the Laurentide Co. that is not recorded.

Work for Women

The latest publication of the Women's Department of the Canadian Reconstruction Association is a twelve-page booklet dealing with post-war work for women. It bears as title, "What Shall I Do Now?" and contains quite a number of helpful suggestions in answer to this question. As a supplement to the main part of the booklet, there is given an alphabetical list of usual and unusual occupations of Canadian women. The keynote of the booklet is contained in the first two paragraphs:

"To find the best employment is part of our war readjustment. Sometimes it seems to us now as if it had been easy to make a choice of work in war. Choosing an employment in peace may appear sometimes more difficult. But Canadian women as the result of war activities are endeavoring to fix a new standard of national service in all their employments, and this can be done without sacrificing the best interests of the individual.

"Canada needs the service of her women workers. The productive worker and the necessary worker are in reality national servants. This principle possibly has never been realized by nations as it ought to have been. A brief review of important employments for women may enable the munition worker, the woman in other war activities, the girl entering employment from school, and women workers in general, to take each her own individual part in the great work of reconstruction."

Directory of Chemical Industries

The Dominion Bureau of Statistics has just issued a Directory of the Chemical Industries in Canada, listing the names, addresses and products of nearly five hundred Canadian firms manufacturing chemicals, or other products in which the processes used are essentially dependent upon the agency of chemical change.

This publication will undoubtedly fill a long felt want and should be of considerable value to the general public as well as to the trade. It has come to be a well accepted truth that scientific progress is essential to the true development and material welfare of any country, and in Canada, where many of our natural resources are as yet almost unknown, the importance of laying sound foundations cannot be over-estimated. Some of the possibilities of industrial chemical development were made apparent by the remarkable accomplishments along these lines in Canada during the war, and consequently popular sentiment now favors the idea that this country should, to a large extent, be freed from dependence upon other countries for our chemical needs. In order that this idea might be guided along well advised lines, it was essential that a survey of our chemical industries should be made, and the bulletin now referred to represents the first phase of this work.

The Directory is in two divisions: (1) an alphabetical list of the various concerns, the head office address of each, together with a detailed list of their products, including in the latter chemicals and products resulting from chemical processes; (2) a list alphabetically arranged of the chemical products manufactured in Canada showing the names of the various firms engaged in their manufacture.

Bedroom and Dining Room Furniture

A catalogue in which the illustrations speak for themselves in that of the Bell Furniture Company, Limited, Southampton, Ont., in which pictures of the various lines of bedroom and dining-room furniture, manufactured by the company are shown. The half-tone work is excellently done, and the catalogue, printed on heavy, coated paper, is a genuine work of commercial art. The various pieces of furniture carry key numbers which are related to a price list issued separately.

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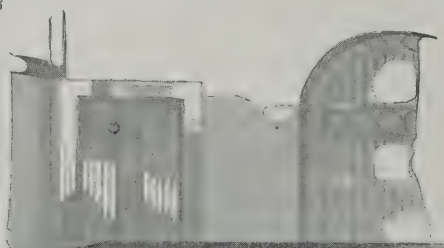
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958





Lower illustration shows battery of Counter Height Filing Sections in the office of the Western Assurance Co., Toronto. These filing sections hold a large proportion of the thousands of records in daily use by this Company. Any clerk in the department can get the record he wants in a few minutes. Figure what the executives and employees of this Company save in time and steps every year, to say nothing of the saving of space.

OFFICE SPECIALTY

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FILING SYSTEMS

OFFICE AND FINANCE

A Standard Cost System for Shoe Manufacturers*

By JOHN L. THORNE

(Of Thorne, Mulholland, Howson & McPherson, Industrial Advisors, Toronto)

MOST of you, I would judge, have read the report of Edward N. Hurley, when chairman of the Federal Trade Commission, as to the ridiculously small number of manufacturers who are making a profit, and of the large number who have no accurate knowledge of the true cost of their production; but has the real significance of this statement been realized—that estimated costs and failures always go hand in hand? It is true that a selling price must be fixed before the samples are taken out on the road by the salesmen, and that it is necessary to compute, beforehand, the cost of such samples; but that is no excuse for the old-fashioned estimate sheet, which does not take into account the past experience of the company.

Loss in Materials

Every manufacturer knows the exact quantity of material in any given pair of shoes, but he also knows that there has been more material used than appears in the finished article. And that is where the shoe manufacturer who has no accurate cost system makes his first costly guess. If his last season was a poor one from a profit standpoint, he becomes more determined than ever to land more business, thinking that a greater turnover will prove his salvation, with the result that each item on the estimate is reduced to almost its bare necessity. Prudence, of course, tells him that he is running pretty close to the wind, but he faithfully promises himself that he will devote more time to the factory and eliminate a great deal of what he terms unnecessary waste. You all know the story, gentlemen; it is as old as business itself. Some of us realize our folly and reform before it is too late, but the majority struggle along, striving to accomplish the impossible, until the assignee relieves them of their worries. To those of you who believe this picture has been overdrawn, I ask that you conscientiously prepare a statement of the actual production in your factory and credit your material accounts with the values allowed on your estimates. If you have no cost system, the difference between what you *estimated* you would use for the production attained and what you actually *did* use in the ordinary course of that business, will forever convince you of the folly of banking on paper profits.

Accounts that Should be Opened

The remedy is simple. Open up accounts in your factory ledger for each general division of material, such as Uppers, Linings and Trimmings, Bottom Stock, Supplies and Findings, and Containers. To each of these accounts charge its proper portion of your inventory, and see that all purchases are also entered under the heading affected. Then each month credit these accounts with the value of the material you allowed for when fixing the selling price, and the difference in each account will represent the value of each group of materials you should have left on hand. Unless your books were in fairly satisfactory shape before you made the change, however, you will find a vast difference between the value of your inventory as shown in your books and the value of stock which is actually on hand. Usually it is a shrinkage, and it is necessary to operate the system for several months before a constant percentage can be obtained. Once this is established, however, the differences will gradually diminish until the book figures may quite safely be used to determine your monthly profit or loss.

There should also be mentioned here the great advantage of a monthly statement. Most manufacturers depend upon the regular semi-annual or annual inventory to tell them how much money they have made or lost, but the manager who knows where he stands each month is in a much better position to correct his mistakes and profit by them, than the manager who is content to be told only twice a year that he has made progress or dropped behind. Under the system which I am outlining it is not necessary to go to any particular trouble in order to find out your profit for the month. In the case of the average manufacturer it is but the work of a few hours for his accountant, and the whole story is laid before him.

Laid Down Cost of Material

Now to go back again to your cost. You have seen how it is possible to accurately determine the quantity of material used in a given number of shoes. There is another factor involved, however, which must be taken into account and that is the laid-down cost of your material. To those manufacturers whose finances will permit them to purchase their whole season's requirements in advance, a fluctuating market holds no terror, but to the average business man, who has to buy in smaller quantities, it is important that he protect himself against a rise in values. It is readily seen that if you include any material in your estimates at your actual laid down cost, but have not sufficient of it on hand to complete your season's business and have to go into the market again when the price has advanced, you must take a loss on the transaction. To avoid this it is only necessary either to make sure that you can duplicate your purchase, or to anticipate the market, and spread the advanced cost over the whole season.

Not long ago a manufacturer of my acquaintance turned a substantial profit into a big loss by displaying undue optimism over his supply market. It appears that he had bought, as usual, only half his season's requirements, and, despite warnings of an advance, he accepted the oral assurance of one supply house's salesman that he could repeat at the same price, and did not provide for an advance in his estimate. The result was that when he returned to the market it had risen several points, and the additional cost came out of his own pocket instead of the customer's. To summarize your material cost, then, there are two distinct items to be considered: First, the natural shrinkage of material in the course of manufacture, which can be accurately determined from past experience, and, secondly, a possible rise in cost of further purchases after you have fixed

*Summary of an address delivered by Mr. Thorne during a convention of Boot and Shoe Manufacturers at London, July 9, 1919.

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your selling price. As regards the second item all I can say is that, when in doubt, take the benefit of it, and you will always be on the sunny side of your profit and loss account.

Now to pass on to your labor costs. It is a great mistake to have but one wages account, as the average manufacturer without a cost system usually has. As we all know, analysis is the first step before correction. With one wages account it is very difficult in the event of a gradual, or even a sudden, rise in the amount paid to your employees to point your finger at the cause. But with a separate account in your factory ledger for each department, such as the Cutting Room, Stitching Room, etc., it is a very simple matter to determine the cause of any fluctuation immediately the statement comes before you. Another distinct advantage of the departmental wage system is the ease with which you can check up the figures you used to fix your selling price. Very few manufacturers over-estimate their labor costs. When arriving at the cost of a new sample, they are inclined to be unduly optimistic over the productivity of their equipment and employees. By keeping track of the wages paid in each department, however, and comparing the production, it is only the work of a few minutes to find out by how much they are exceeding or reducing your labor costs. It is understood, of course, that when I speak of labor costs, I refer to your productive labor only, as distinguished from what I term non-productive or indirect wages, such as foremen, elevator men, factory office help, etc. It is a good plan to have a statement laid before you each week, showing the amount earned by each department according to your estimated cost of manufacture when fixing the selling price, and the amount actually paid. In this way only can you see how you are coming out on your labor costs.

Manufacturing Expense

Now we come to one of the most difficult questions of all, viz., factory overhead or manufacturing expense. Included in this item are such expenditures as non-productive wages, as explained a few minutes ago, repairs to machinery and renewal parts, sundry factory supplies which cannot be conveniently charged directly to the product, depreciation, royalties, cripples' lasts, dies, etc., and last, but not by any means less important, rent, heat, light, power, insurance, taxes, etc.

When I started to discuss factory overhead, I stated that it was a difficult problem. By that I meant, overhead is a dangerous weapon in the hands of an optimist. I have known some manufacturers to estimate their material costs so closely as to be almost uncanny. I have seen the labor costs of others remain almost in a constant ratio with their payrolls, but when it came to providing for their overhead a stranger could guess almost as closely as they figured. When it is understood that the greatest part of your overhead remains the same whether your production is valued at a million or double that amount, it is readily seen how careful one must be not to overstep the mark. Many methods have been tried to more or less control this item, but they all resolve themselves into the same question: What is your production? Past experience will tell you what your factory *can* do, and general business conditions can be used to gauge what your output *should* be. Taking these two items into consideration, it is not difficult to apportion your overhead accurately, if you are not too optimistic over your sales. It is much better (within reason, of course) to underestimate your production when apportioning overhead than to overestimate it, because the former means a decided loss and the latter an additional gain. To keep an account of overhead—by charging in all the items which go to make it up, and crediting the amount absorbed by your production—it is a

simple matter to ascertain whether it is gaining on you and causing an unexpected loss, or keeping within the amonut provided.

We have now taken up the three main elements which go to make up the actual cost of manufacturing your shoes, viz., material, labor and factory overhead, and there are but two other factors involved—the cost of placing your product on your customers' shelves and getting paid for them—and your profit. Here, again, it is essential that separate accounts be kept for specific items, such as Salesmen's Salaries, and Commissions, Salesmen's Travelling Expenses, Advertising, Bad Debts, Office Salaries, Office Expense, etc., as it enables one to determine what the proper ratio should be in each department.

In regard to bad debts, it is much wiser to put aside a definite percentage of your sales than to simply write off your accounts as they become worthless. Experiences with credits vary with each manufacturer, and it is, therefore, impossible to state what percentage of your sales should be set aside to cover your losses on this account, but this system is infinitely better than the happy-go-lucky method of pocketing losses as they occur. Credit losses are heaviest when business is poorest, and therefore you are less able to survive the blow. But, apart from this, it is known that those manufacturers who simply write off accounts when valueless do not include this expense in their costs and are, therefore, this much out of pocket, while those manufacturers who set up a reserve do include it in this selling price, and are prepared for the loss when it occurs.

Returns and Allowances

One other item which will stand close attention is your returns and allowances. Most manufacturers simply charge the sales account with them, and as a consequence they are practically lost sight of. If you keep a separate account of returns and allowances a very valuable barometer of your business will be furnished. One manager I know claims that he saves twice his salary every six months by watching this account. Salesmen who promise the customer one thing and tell their employer something else—customers who are dishonest—improvements in your methods of manufacture, etc., are all told of in this account if you will but give it a chance.

Methods of distributing commercial overhead over the product are as numerous as they are complicated. The simplest and safest way is to chart your commercial overhead in advance, and then add to your different products an amount sufficient to absorb it. What percentage it should be for any particular make of shoe can only be determined from the output and expense of each.

It is to be regretted that only general principles can be dealt with here, but when it is remembered that practically no two manufacturers are operating under exactly the same conditions, it will be seen how dangerous it would be to try to generalize on details.

The Mystery of Foreign Exchange

Idle to Protest Against Exchange Rates which Merely Express Trade Conditions

(From "Canadian Finance")

When a Canadian finds that it costs approximately $103 to purchase a bank draft for $100 payable in New York, he immediately becomes interested in the question of foreign exchange. He is still more interested when he finds that a draft payable in England for the equivalent of $100, remitted by way of New York, costs a little less than $100 in Canada. To the average man

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Capital Paid Up	$14,000,000
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this difference in the rate of exchange between New York remittances and London remittances is indeed a conundrum.

Several weeks ago, owing to the discontinuance by the Government of Great Britain of its policy of stabilizing exchange rates, the British pound sterling, with a par value of $4.86 2-3, could be purchased in New York for $4.58, while $102.12 was required in Winnipeg to purchase a draft for $100 payable in New York. It will be seen, therefore, that the decreased value of British money in New York was offset materially by the increased value of American money in Canada. Although the present rates of exchange in New York are referred to as favorable, certain adverse conditions always arise when the money of one country may be purchased below its face value in another country. A draft for $100 payable in New York last month cost approximately $106 if purchased in England, $116 if bought in France, $150 if obtained in Italy, and $102.50 if purchased in Canada. To take just one example, this would mean that in Italy an article which had to be obtained in New York, where it was worth $100, would cost the Italian $150. On the other hand, if a resident of Italy held an American bond worth $100 in New York, he would be able to obtain approximately the equivalent of $150 for it in Italy. The shrinkage of foreign money values in New York, therefore, tends to have a triple effect. It encourages the sale by residents in foreign lands of American securities, and it forces the foreigner for economic reasons to curtail as much as possible the purchase of American products. It also enables the foreigner to sell his products to New York cheaper than he could if the exchange rate was near par. In the case of an Italian selling his products and receiving American money in payment, he would receive the equivalent of $150 in Italian money for each $100 worth of goods he sold in New York.

U.S.A. Creditor Nation

The exchange situation is causing American financiers some concern, for they realize that to refer to it as being "favorable" is not altogether in accordance with the fact. The United States during the past four years has changed from the position of a debtor nation to that of a creditor nation. It has accumulated gold to such an extent that its financial men admit that it has too much compared with what exists in the outside world. An American view of the situation is given below, being an extract from the bulletin of the National City Bank of New York:

"The gist of the whole problem is in the fact that international debts must be paid in gold or other transportable property. We have here a case of such magnitude that gold is out of the question, and we have nothing to consider but imports of goods or securities.

"Unless the creditor country is willing to receive its pay either in goods or securities it plainly has no use for the trade. Its decision means that it would rather keep its own products than export them on those terms. Exchange goes to a prohibitory premium, and exports decline until the balances are no larger than can be settled. It is idle to protest against exchange rates which merely express trade conditions. They perform a necessary function. When an individual or country cannot pay for purchases in a manner acceptable to the seller the time has come to cease buying.

"Is it a calamity to a country that is no longer obliged to export several hundred millions' worth of its products annually to pay interests on its debts, and that it is in position to receive several hundred millions' worth of products on interest account?

"We do not think so. In changing over from the position of a debtor country to that of a creditor, this country is in the position of an individual, who, beginning life with nothing, must give labor or the products of labor in direct exchange for everything he receives, but who later accumulates capital and then is able to live in part upon income previously earned."

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Head Office, MONTREAL **Established 1864**

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Total Deposits (April, 1919)	138,000,000
Total Assets (April, 1919)	166,000,000

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You see the point? He was sending money out of the country to tell people to keep their money ***in*** the country.

Other things being equal, Canadian business firms should give preference to Canadian goods.

That is vital to Reconstruction --- Reconstruction on a really sound basis.

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The Better the Paper the Better the Booklet

War covered a multitude of sins---among them, poor printed matter. There is no excuse today. Paper is such a small item of cost compared with artwork, cuts, printing, and distribution, that you simply cannot afford to sacrifice selling value to save a few dollars on your paper.

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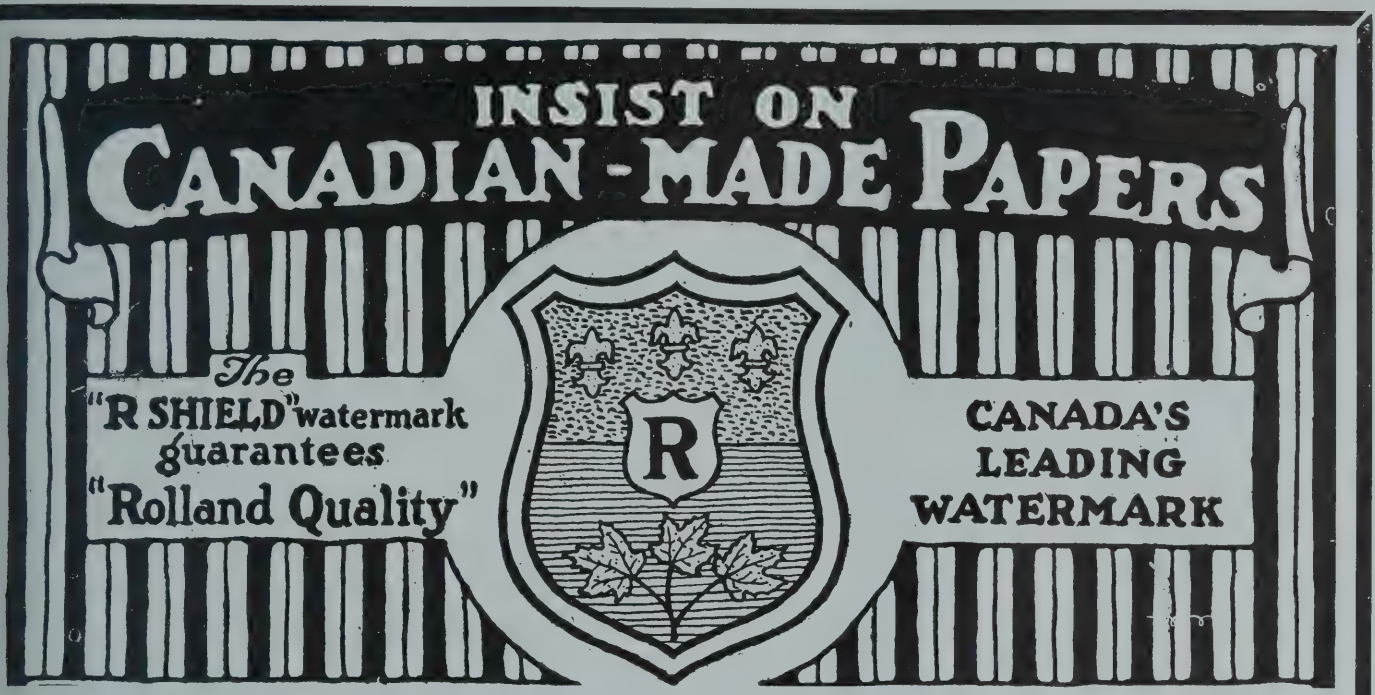
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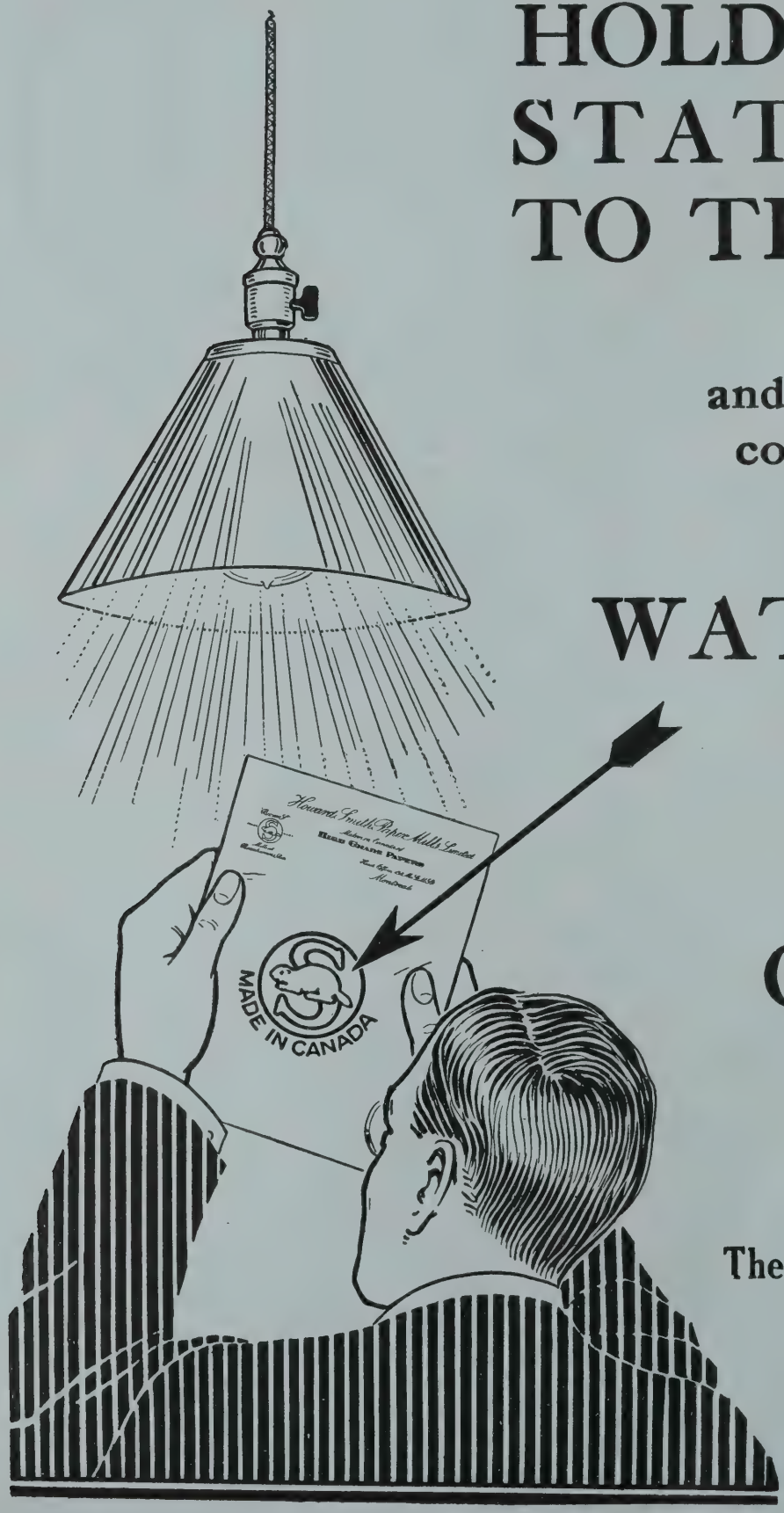
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Good Things from Other Magazines

Our High Prices Have They Come to Stay?

In the May Issue of INDUSTRIAL CANADA we published an article on "The Permanency of Present High-Price Levels," which was written by Prof. Irving Fisher of Yale University and which attracted a good deal of attention when it originally appeared in the United States. The following article supplements Prof. Fisher's article, dealing particularly with the effect of currency on prices. The conclusion is reached that there can be no drop in prices for some time to come

By ALFRED J. LOTKA
(From the Scientific American)

BUSINESS conditions are determined in part by objective factors, such as the effect of weather upon the crops, the discovery of new gold fields, the existence of a state of war and the consequent upheaval in demand and supply along abnormal lines, and so forth.

On the other hand certain psychological factors have a large influence upon our economic system. Over-confidence and a somewhat exaggerated spirit of enterprise and activity are the invariable attendants of the upward movement preceding the sudden descent of a so-called economic crisis, just as despondency and collapse of confidence form part of the phenomenon of the crisis itself. In such cases it is usually difficult or impossible clearly to separate cause and effect. The psychological condition is no doubt partly caused by the existing objective state of affairs; but in turn the frame of mind of the people exerts a reflex influence and affects the objective factors of trade.

Where We are Liable to Err

All this is perfectly natural. The purpose or function of our mind is to enable us to adapt ourselves to circumstances and to adapt the external world to our needs. Harm arises only when we proceed under mistaken impressions. That under certain conditions we should retrench in our constructive activities is sound business; where we are liable to err is in misjudging when conditions call for such retrenchment or when they justify expansion.

There are indications that our economic system is at the present time suffering more or less acutely from such misjudgment.

In many quarters production is held up, business is deferred, in the expectation that presently a fall in prices will offer more advantageous conditions for purchasing materials and labor; or, construction work is delayed out of solicitude lest a fall in prices should leave the investor with property on his hands which he will not be able to dispose of profitably. There is in many fields a willingness to sell, but much hesitation in buying.

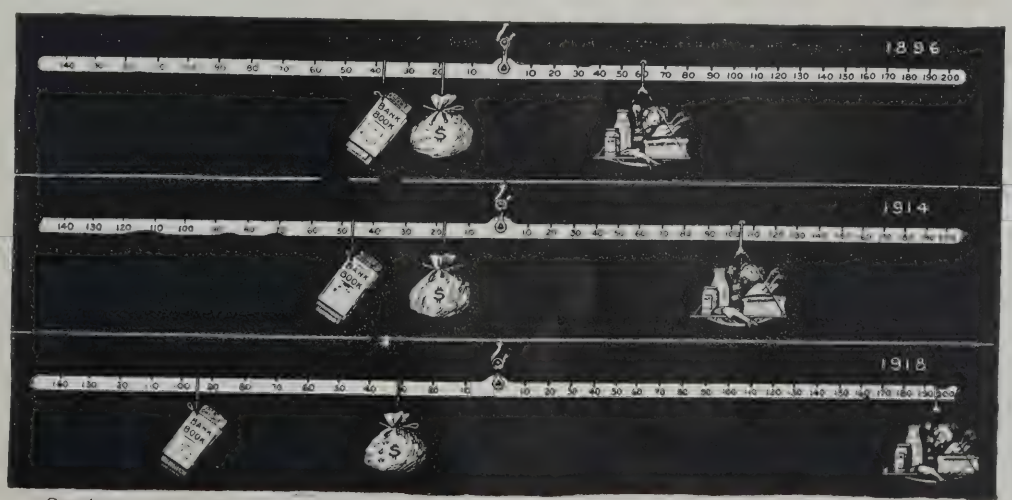
The fundamental cause seems to be largely psychological—the recollection of pre-war prices, and the tacit assumption that they represent in some obscure sense "normal" prices, towards which we shall ultimately revert.

Where Opinions Differ

Note that this conviction is not held without partiality. As Prof. Irving Fisher, of Yale University, points out, many manufacturers think that prices must come down, including the price of labor. But suggest to them that they make a beginning by lowering *their* prices, and immediately they are ready with a demonstration that *their* prices can not come down, and that *they* can not pay lower wages.

The fact is that in this latter contention they are probably substantially right. Where they are at fault is in supposing or maintaining that their case is peculiar. While here and there in special departments there may be fluctuations downward as well as upward, the present high tide in the general price level is probably due to fundamental causes which are not likely to be removed or materially altered in the near future, if at all. Professor Fisher, addressing a Conference of Governors and Mayors assembled at the White House, expressed his view of the situation as follows:

"The fundamental practical question confronting business men is whether the general level of prices is going to fall. In my opinion it is not going to fall much, if at all. We are on a *permanently* higher price level, and the sooner the business men of the country take this view and



Graphic representation showing the relation between total money in circulation, total bank deposits, velocity of circulation, total trade, and general price level

adjust themselves to it, the sooner will they save themselves and the nation from the misfortune which will come if we persist in our present false hopes."

In order to understand the situation it is necessary to form a definite idea regarding the way in which the general price level is affected by the total amount of currency that is in circulation. It will assist us in gaining an understanding of this matter if we consider first of all an ideal simple case. We can afterwards fill in the details corresponding more closely to actual conditions.

The simple case which we shall first consider is that of a community in which all payments are made in one kind of currency, say gold, and in which there are no credit transactions.

In order to deal in round numbers, let us suppose that in this community there are in circulation 50,000 ounces of gold which in our coinage represent about one million dollars.

Each gold dollar (that is, 1/20 of an ounce of gold), in the course of the year, changes hands a number of times, once at each purchase or sale in which it is used for payment.

For example, let us suppose that each ounce of gold changes hands, on an average, twenty-five times in a year.

At each sale a certain number of gold dollars pass in one direction, and a certain number of pounds of various goods pass in the opposite direction.

The total number of such passages from hand to hand of a gold dollar within a year is evidently the product of $1,000,000, the total gold in circulation and 25, the number of times each dollar changes hands within a year, making a product of twenty-five million.

On the other hand there is a certain definite number of pounds of goods bought and sold, which are paid for by those twenty-five million dollars. Supposing for example that 1,000 million pounds (one billion pounds) of goods change hands in the course of the year, then the average price per pound will be 25/1,000 of a dollar, or 2½ cents.

How Prices Rise and Fall

Now suppose that all other conditions remain unchanged, but that by some means or other we are able to just double the amount of gold in circulation. In these new circumstances fifty million dollars will pay for the same 1,000 million pounds of goods. The price per pound, on an average, will now be five cents, just twice what it was before.

It will be seen, therefore, that, if in such a community as we have been considering, the total amount of currency in circulation is increased, while other conditions remain unchanged, the effect is to raise all prices in the proportion of the increase in the amount of circulating medium of exchange.

Suppose that the doubling of the gold dollars is carried out quite impartially. Each man would suddenly have twice as much money in his pocket as before. At the same time all prices would be doubled. Evidently this would make absolutely no difference in the general economic status of the individual in the community. It is only if the readjustment takes place unevenly that the change causes more or less acute discomfort and suffering to some, while it brings profit to others. In point of fact this is always the case in actual



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IMPORTANT JUDGMENT BY COURT OF APPEAL

THE action brought against the BOECKH COMPANY, LTD., to prevent their using the descriptive words "RUBBER SET" on, and in connection with their Brushes, has been **dismissed with Costs** against the Plaintiffs by the unanimous judgment of the Court of Appeal, which affirms the judgment of the Trial Judge, the Honorable Mr. Justice Masten.

The word Rubberset, or the words "RUBBER SET," are the only words which **accurately** and **absolutely** describe how the Brushes which have a Rubber Setting are made, and no person has, nor can have, a monopoly in the use of such word or words.

We think it only fair to notify the Trade and the General Public of this judgment, so that they cannot be misled as to our right to make use of the words "RUBBER SET" to indicate the process by which our genuine "RUBBER SET" Brushes are made.

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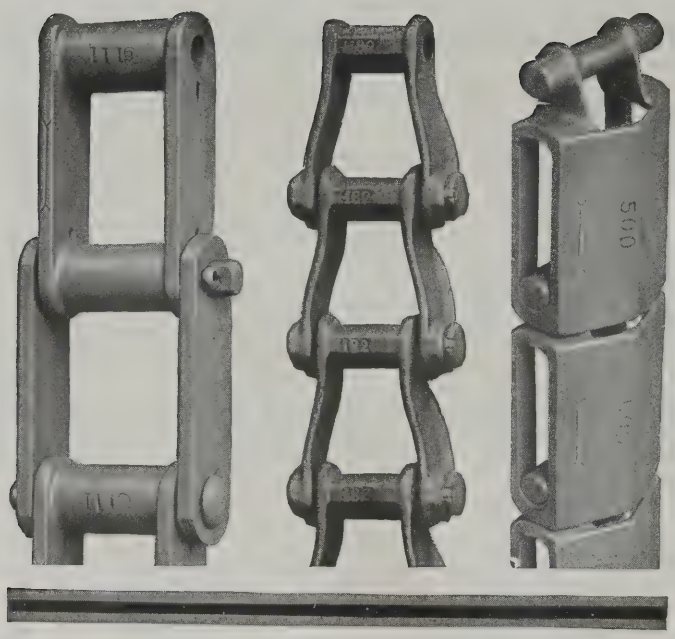
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practice, owing to the effect of long time contracts and the inertia of law and custom.

In practice, of course, it will never happen that a change in the amount of currency in circulation takes place unaccompanied by other changes in various economic factors. But the effect of the change in the amount of currency in circulation will be essentially the same, though the influence of other factors (such as an increase or decrease in production of commodities) may be superimposed upon that of the change in circulating medium, so as either to reinforce its effect or to mask it more or less completely.

Now in a modern community there are other things aside from gold that function as a medium of exchange. Coins made from other metals do not materially affect the argument, so far as the United States is concerned, because their total value is but a small fraction of that of the gold in circulation, and their issue and exchange value is fixed by law in terms of gold.

The situation is very different in the case of certain forms of paper currency. Since 1914 Federal Reserve Notes and National Bank Notes amounting in the aggregate to a large value have been issued, which are but partially covered by gold. That portion of the paper currency thus issued, which is not covered by gold, represents so much increase in our total money in circulation.*

Effect of Bank Deposits

Another factor which exerts a very important influence on the purchasing power of the gold dollar is the habit or custom established to a greater or less extent in modern civilized countries, and in particular in our United States, of carrying bank deposits subject to check. Such deposits, formed in part of promissory notes secured by various forms of a non-negotiable property, virtually convert such property into liquid, circulating currency. Using again the words of Prof. Irving Fisher:

"To put it crudely, banking is a device for coining into dollars, land, stoves, and other wealth not generally exchangeable."

The effect of an increasing prevalence of payment by check is very much the same as if the amount of gold in circulation were increased: Taken by itself, that is to say, in the absence of any compensating changes, it is bound to produce a rise in the general price level. Similar remarks apply to the practice of trading on the basis of book credit, since this tends to create offsetting debts, which can be partially cancelled without money changing hands. This again is virtually equivalent to the effect of increasing the amount of money in circulation and tends to bring about a rise in the general price level.

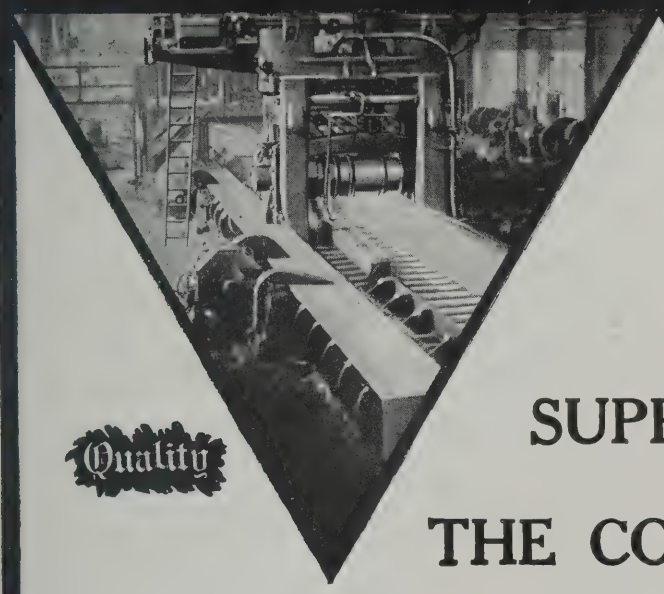
The relation between the principal factors thus affecting the general price level is shown graphically in one of our illustrations.

The upper one of the three diagrams represents conditions in 1896. The money in circulation at that time was 88 billion dollars, its velocity of circulation 18.8—that is to say, each dollar changed hands 18.8 times in a year. This fact is represented in the drawing by a money bag suspended from the scale arm at a point corresponding to 18.8.

Similarly a bankbook suspended at a point 36.6 indicates that in 1896, 2.71 billion dollars of bank deposits circulated with a velocity of 36.6 per annum for each dollar.

These two factors are balanced on the right hand side of the scale by a certain quantity of all kinds of goods multiplied by the lever arm, which here represents the price per unit, expressed in percentages of the 1909 prices. It will be understood that the ordinary principles of the lever are

*The recent issue of Federal Reserve Bank Notes does not represent any expansion of our currency, since they were merely substituted for silver certificates which were retired.





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assumed; the leverage equals weight multiplied by distance, and is equal on both sides. The diagrams for 1914 and 1918 are similarly drawn, but the corresponding figures here are:

	1914.	1918.
Currency in circulation	1.94*	2.46
Velocity of circulation	17	30
Bank deposits	8.89*	12.5
Velocity of circulation	46.8	95.6
General price level, expressed in percentages of that in 1919	104	198

*In billions of dollars.

How does all this apply to the present conditions in the United States?

Over one billion dollars in gold has come into this country from abroad since 1914. On June 30th, 1918, the portion of the gold reserve of the Federal Reserve banking system which supported national bank deposits and Federal reserve notes was three times as large as the gold reserves under the old national banking system on June 30th, 1914. During the same period credit instruments (demand deposits and notes) increased about twofold. There is at present a surplus of about 700 million dollars over the legally required gold reserves, and on a conservative estimate this would be sufficient to support a future expansion of 50 per cent. in our credit instruments.

These factors in themselves go a long way to account for the present high prices, and do not point toward any probable fall of level.

Such a fall might be induced or aided by a return of gold from reserves into circulation. But experience elsewhere and in the past makes such return appear extremely improbable; the habit of carrying gold currency has lost ground in our Western States and also in the United Kingdom.

Another factor which would tend to lower our price level would be the outflow of gold to Europe and to other countries. But we are now the creditors of Europe, and money will flow towards us rather than out of our borders. Nor can we figure with any degree of confidence on the introduction of low-priced goods from Europe when normal trade is re-established, and look for a corresponding outflow of gold. For prices have risen to even higher levels in Europe than they have here.

The reconstruction and rehabilitation of devastated regions will call for loan issues and for extension of bank credits. Our Liberty bonds furnish unrivalled security for further borrowings from banks for commercial purposes, and will continue to exert their credit-expanding effect until redeemed by the Government.

Any attempt to reduce bank credit will meet with strenuous opposition. The hostile attitude of labor toward lowering of wages will deter legislators and bankers from any organized policy of contraction.

Most important of all, perhaps, will be the effect of expanding credit in Europe and elsewhere outside our boundaries. The needs of the war have taught the countries of Europe the uses of deposit banking. In China and India also the system is growing. The result will be much the same as if a new source of gold had been found.

The net conclusion seems to stand out clear: All indications are that we may look for little if any fall in the general price level in the near future; that on the contrary we may expect a rise to continue for a considerable time to come. To sum up in the words of Professor Fisher:

"We are on a new price level, which will be found a stubborn reality. Business men are going to find out that the clever man is not the man who waits, but the one who finds out the new price facts and acts accordingly."

THE CANADIAN APPRAISAL COMPANY
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The market conditions of high costs, which arose soon after the outbreak of war and have ruled ever since, have very largely destroyed the significance of figures of original costs appearing in Plant Accounts, particularly where these represent properties installed or acquired in pre-war times. Such figures are to-day misleading, and dangerous if adopted as a basis for insurance, and equally so for determining present day manufacturing costs.

Complete Insurance protection calls for present day values. The cost of replacing any but a new plant to-day would almost invariably be much greater than when it was originally installed, and if it is not insured on this basis of to-day's values you become a co-insurer; in other words, you are not fully protected, and in the event of a loss by fire you may have to bear a substantial part of such loss yourselves.

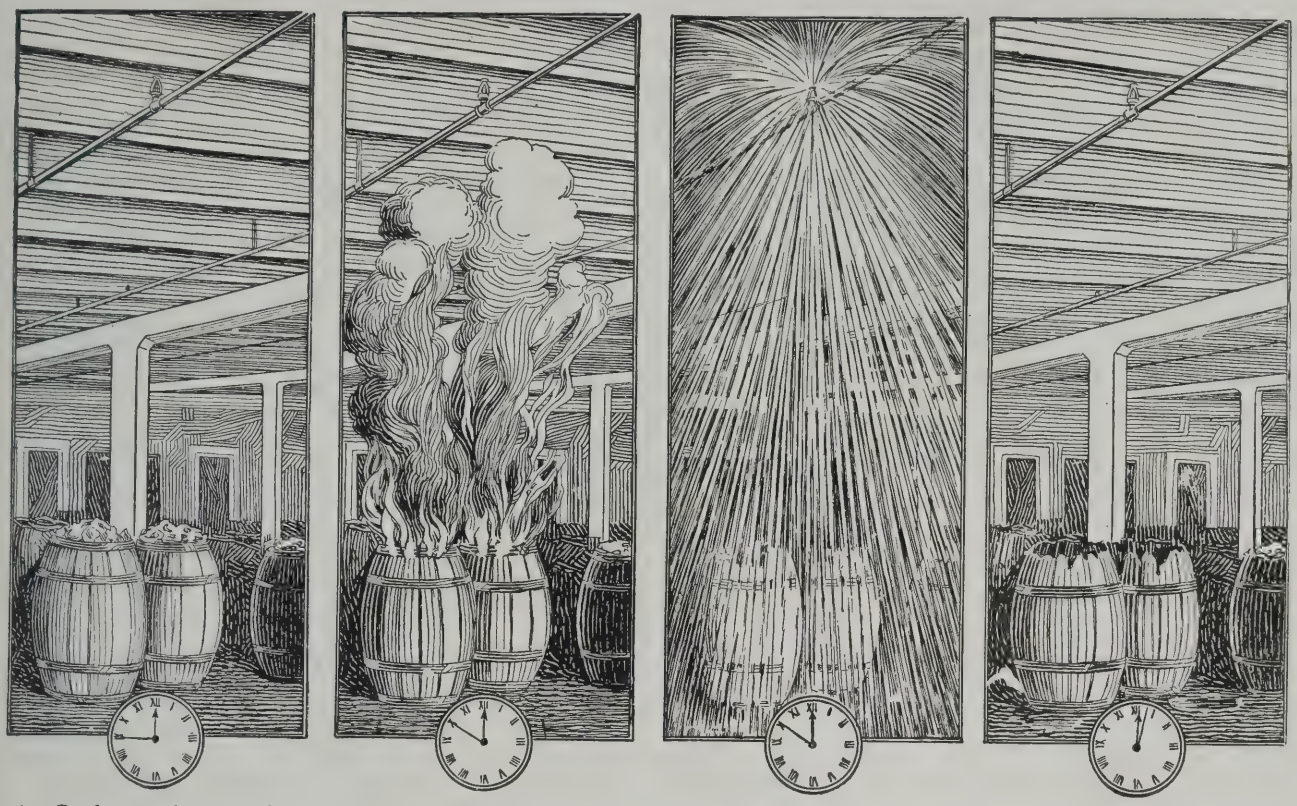
For the same reasons, a cost system based on pre-war costs is to-day a delusion and a snare.

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The Grinnell Standard is higher than the Fire Underwriters require. We don't try to see how close we can skate to the line. We are not content with satisfying minimum regulations. We undertake to give infallible fire protection. We maintain the only research laboratories in the trade.

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A NEW COMMANDMENT FOR LABOR

In view of all the signs and portents of the times one of the first of the new commandments should be,—"Thou shalt not strike"—and in the term "strike" should be included lock-outs or any other form of deliberate interruption of the normal flow of the currents of trade and commerce.

By HORATIO BOTTOMLEY, M.P.,
Editor of "John Bull."

It is a very long time since Moses brought those tablets bearing the Ten Commandments down from Mount Sinai; and having regard to their antiquity, I think it will be generally conceded that, on the whole, they have fairly well served the purpose of covering most of the things people should not do, down to the present time. We are, however, living in abnormal days, and are on the brink of an entirely new era, and now that the Government has taken up my suggestion for a HOME Peace Conference, I would venture to throw out a hint to the Church that, in its turn, it might convene a special Congress to modernize its doctrines and ritual, including an up-to-date revision of the Commandments.

And I do not hesitate to say that in view of all the signs and portents of the times one of the first of such new commandments should be—"Thou shalt not strike!"—and in the term "strike" I, of course, include a lock-out or any other form of deliberate interruption of the normal flow of the currents of trade and commerce.

I listened very intently to most of the discussion in the House of Commons on the miners' troubles, and I carefully studied and noted the attitude of the speeches of the men's so-called Leaders—each of whom, in acknowledging the reasonableness of the Government's attitude, could do no more than promise to "recommend"—sadly admitting his utter powerlessness to "lead." The truth is that Labor has got out of hand. It is catching the infection of the Red Peril now threatening the whole world—still smarting from the scourge of war—is being overtaken by an epidemic of anarchy.

And all these strikes, and threats of strikes, are but natural corollaries. I do wish the working classes could be made to understand these things. What is wanted now is a great Home Propaganda—conducted, not by political deadheads and duds, but by men who understand and are "understanded of" the people. There is not a moment to lose. The miners, the railwaymen, and the transport workers must be made to realize that on *their* shoulders rests to-day the most solemn responsibility mankind ever had to sustain. The wages of sin, we are told, are death; the wages of strikes are death, bloodshed, starvation, anarchy, and the murder of little children and they are also—in the case of Britain—shattering of Empire, and loss of trade. Should the strikes come, then, by a blasphemous irony, England will soon be in the same position as Germany and Russia. And all that, by their villainy and their cunning, the Bolshevists and the Schemers will have done.

Let Workers Be on Guard

"Thou shalt not strike!" Let that commandment ring from every pulpit and from every platform, and from every paper during the next fortnight. Let the workers be on their guard. I know we have the assurance of the Government that preparation has been made "for taking action at the proper moment against those who are considered to be ringleaders in Bolshevist activities in this country"; but the proper moment is *now*. And the first thing to be done is to



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abolish that moth-eaten and dangerous old doctrine of the Right of Asylum. How many spies and enemy emissaries of all kinds have been smuggled into Britain under the protection of that silly theory, we shall never know. But is must now go—once and forever. We must cleanse our shores of all suspects, and must not be too particular as to how we go about it.

Capital Nearly Exhausted

At heart the British working-man is sound, and he is not a fool. The war, however, has taught him how rich the world really is, and he will take a lot of convincing that our available wealth—that is to say, our capital—is nearly exhausted. He will have made a note of the statement in Parliament last week that, even now—three months after the Armistice—we are spending daily within £1,000,000 of what the war was costing us; that is to say, we are finding in one way and another £6,000,000 or £7,000,000 every day in the way of abnormal expenditure. And the miners, and the railwaymen, and the transport workers, have an idea that a few shillings more on their wages and a few hours more off their work really won't make a very great difference in the end to anybody. And who shall blame them? On the other hand, who shall enlighten them?

How shall they be made to understand that, having spent, since the beginning of the war, ten thousand millions of money, and raised only two thousand five hundred millions, there is a little matter of seven thousand five hundred millions to be put right? Of that sum, we have lent our Allies and Dominions, and Russia, about two thousand millions—most of which we shall never see again—but assuming it all comes back, there is still what the financiers call a dead-weight debt of over five thousand millions—and *that debt is a first charge upon industry;* that is to say, upon both Capital and Labor.

Oh, yes, my working-class friend, we mustn't forget Capital—without which, your labor is useless. Cripple Capital, and you kill Labor. And that is just what is happening to-day. The nation has been suffering from the consuming fever of war, and for nearly five years we have been living on ourselves devouring our own flesh. And there are two ways only of putting things right.

Here they are: First, we must try to get back those ten thousand millions from Germany—not necessarily in money, but in kind. If we can do that, prices will come down to such an extent at home that your wages will buy twice as much as they do to-day. But here you have to reckon with the Politicians and the Idealists—who don't want to "crush Germany." Well, we must ginger them up!

And here is the other way—and it concerns you. *We must increase production and output to the uttermost limit*—in order to replace the lost wealth of the nation. That is where you—*and the capitalist*—come in. And if you will do it—but only *if* you will—then you can have your increase in pay and your decrease in hours.

But there is no middle course. Nor is there any time for hesitation. The Bolshies and the Yanks are watching!

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Japan receives from visitors to her shores a sum exceeding the value of her exports of coal. The Mikado's Empire is estimated to have received more than 30,000,000 yen from the influx of foreigners in 1918, or $2,000,000 more than the total exports of coal made by Japan. Japanese coal dominates the fuel situation in this part of the world.

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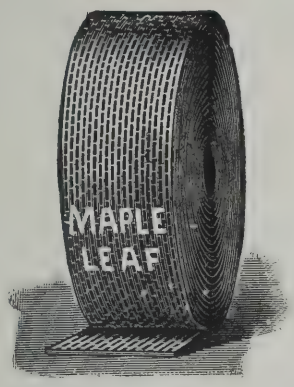
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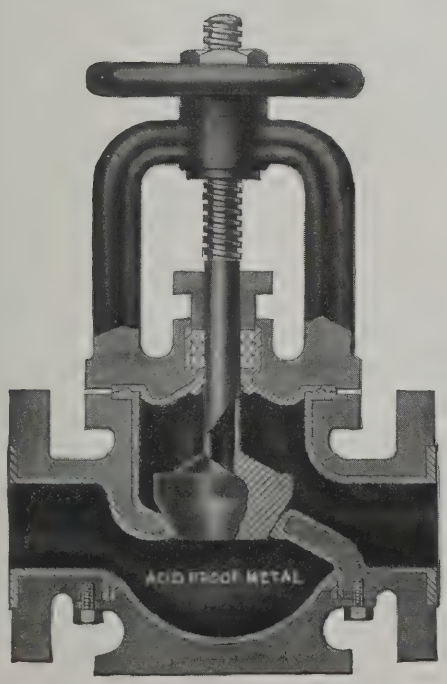
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For lining Acid Tanks, Agitators, and Sulphite or Sulphate Vats, Hoyt's Sheet Metal will give far better service than the ordinary Chemical Sheet Lead in the market. If you will write us stating conditions under which your Sheet Lead is operating, we would be pleased to go into the matter fully and will convince you of the economy of Hoyt's Sheet Metal.

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FACTORIES:
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"LABOR PRODUCES ALL WEALTH"

Fallacy of the oft-repeated claim is disclosed. Labor alone does not produce wealth, but labor plus directing ability does. One is just as necessary as the other, and one cannot do anything without the other. Without leadership there can be no programme.

By F. C. O'Meara.

(From the "Michigan Manufacturer.")

I was making a speech, the other day, to a little group of workmen in a factory out in the state, when an earnest young man spoke up. I had been talking about the cares and worries of the employer. The young man said:

"What you say about the bosses' putting in long hours over their desks after the rest of us have gone home, and getting grey-headed wondering how they are going to keep wages up in spite of lower prices for the things we turn out in the factories, gives me a pain. Don't you know that labor produces everything? Don't you know that most bosses, when they sit up at night in their offices, sit up figuring on how they can make more money out of us?"

I started to reply to him, but he had a little more to say and would not let me go on. He continued:

"We are taking the boss's money only until we get ready to take charge of the factories ourselves. One of these fine days you capitalists are going to wake up to find your businesses in the hands of the proletariat. That's where the control of industry belongs, and that's where it's going to be, ten years from now. The workingman is going to get what belongs to him—if not peacefully, then we're going to get rough. We're only biding our time."

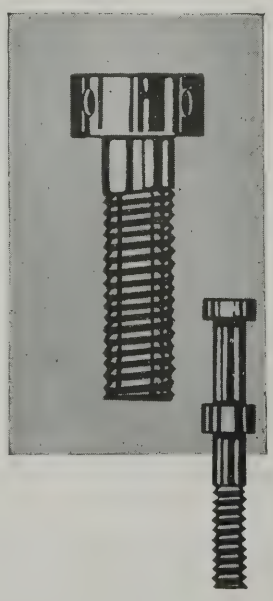
"My dear young man," I said to him, after he had sat down, "you have fallen into one of the two or three fundamental errors that lie at the bottom of socialism. You believe that labor produces everything, which is not true. I think you believe, too, that all men are equal as regards capabilities, and that in place of our present economic system, we should substitute another under which all men would be reduced to a dead level—where every man would receive the same wages, and where there would be no incentive for men to try to get ahead. A good many well-meaning people who don't take the time to think the thing through have been misled just as you have been. Now let's reason a little.

A Case In Point

"You have been told that labor produces all wealth, and you believe it. Suppose we take the case of an industry that you all know about, and see how the theory that labor produces everything would work out. Suppose that to-morrow morning we could order all the executives out of the offices of the Ford Motor Company. We would take away the president and the secretary and the treasurer and the sales manager and the production manager and the advertising manager and all the rest of the men who direct the policies and activities of the company. The only people we would leave would be the men who run the machines out in the factory. How many automobiles do you suppose would be turned out of the Ford plant from that time on, and how many would be sold? I predict, and I think every reasonable man will agree with me, that the Ford plant would close up inside of a week.

"More than that, before the first day was over 10,000 men in the Ford plant would be trying out 10,000 different ways to do the operations they had been taught to do in the only

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way that long practice had shown to be correct. Nine of our every ten departments would be tied up tighter than a drum.

"One man, for example, has for a long time been cocksure that different gears ought to be made of bronze instead of steel. Of course, he never had had a chance to try it out because the 'capitalists' in the 'front office' had ruled that differential gears should be made of steel—and, what is more to the point, had provided supplies of steel only for the differential gear department. But now that there are no more 'bosses,' says this particular workman, we'll make the gears out of bronze. He happens to be a good talker, so he gets up and makes a speech about the advantages of making gears out of bronze. Being a convincing talker, he finds a few hundred other workmen to agree with him. If the men in the other departments balk, why, the bronze gear man and his adherents will go out on strike.

Cars Without Piston Rings

"Another man has never had any particular liking for piston rings—and besides, he has always argued, the people who make the piston rings haven't treated their men right. So he'll make a speech in favor of throwing the piston rings on the scrap pile. He and his followers would make cars without piston rings. If the rest won't agree, we'll walk out. To hell with the others.

"Or suppose these two men won over the whole force—and the plant began turning out differential gears made of bronze and pistons without piston rings. How many Ford cars would be sold—even if by some miracle the workmen could maintain the sales organization?

"And so it would go on down the line.

"What would be the result for all parties concerned? What of the workmen themselves? Certainly, with the plant tied up, they would be out of jobs. How about the grocers and the butchers and the clothiers who depend on these workmen for their livelihood? Certainly without work there could not long be wages—unless, of course, the workmen began commandeering wealth. And what would become of the other manufacturers and the farmers, with their employees, who depend on the grocers and the clothing merchants? What would become of the whole fabric of our material existence? If what I have just outlined as happening in the Ford plant happened to all industry—and that is just what would happen if the directing brain power were removed from industry—America and the rest of the world as well would be reduced to chaos in no time.

The Result in Russia

"We see the thing working out in Russia. The working people arose and took matters into their own hands. What has been the result? Absolute stagnation of industry, poverty, want, bloodshed, starvation and death. Lenine and Trotzky were sure it would work, but now, after many weary months of outrages and pillage the like of which the world never before witnessed, the two of them at last have become convinced that it will not work. They have opened negotiations with the rest of the world to come back into the fold.

"No labor does not produce wealth. Labor PLUS DIRECTING ABILITY produces wealth. One is just as necessary as the other; one cannot do anything without the other. The first rule of civilization is the necessity of leadership. Without leadership there can be no progress.

"Now because of the very nature of the possession of the qualities that make for leadership, leadership begets jealousy on the part of those not possessed of these qualities. It is only human nature that one should envy the attainments of

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THAT is what you do when you sell McClary's Goods. Seventy-two years ago McClary's began to manufacture and sell good goods. To four separate generations the same quality has been supplied. Each generation has told to its children the worth of McClary's goods. To-day, the fourth, is receiving its McClary's education through consumer satisfaction, National and Local advertising. This force of publicity is forever flowing strongly and creating sales. Dealers should take full advantage of our co-operative business methods. Full information sent on request to our nearest branch.

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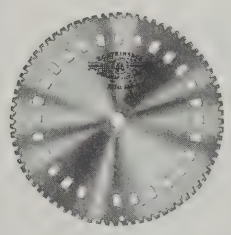
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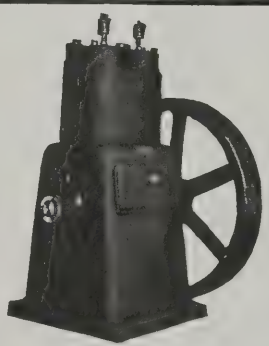
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his more fortunate fellows—the divine injunction to the contrary notwithstanding. For leadership implies authority, and possession of a somewhat larger share of this world's goods. And the envious men and the men who lack the ambition to try to develop their own qualities which would give them leadership, would take possession of the other fellow's possessions by force. Which, whether it be organized, legalized robbery or not, is still robbery. And civilization has never subsisted on robbery. As civilization advanced, robbery grew more and more unpopular, because its devotees found it increasingly difficult to remain at liberty.

"We cannot countenance robbery to-day any more than we could in medieval times. We cannot countenance it because, in the first place, it is contrary to human ideals; and again, because it would tear down all that civilization has built up throughout the ages.

"Instead of robbery, we must have the individual desire to excel. And if that desire is to be translated into accomplishment, we must have coupled with it the willingness to pay the price of effort to attain. We must be willing to study, to develop ourselves, to spend unstintingly of our energy, mental and physical, but particularly mental. Individual attainment is the only answer to socialism.

"And as to your belief that all men are equal in ability, and could be held down to a level, I have only to say to you that human nature is not so constituted. The few would promptly rise again from the mass and we should once more have our present industrial order."

"I'll think it over,' the workman replied to me.

Workmen's Compensation

Results Are Announced Under the Fourth Year of Operation of the Ontario Act

According to the annual report of the Ontario Workmen's Compensation Board, covering the fourth year's operation of the Act, $3,514,648 was awarded last year for compensation and $369,346 for medical aid, the number of cheques issued per day being 248 for compensation and 139 for medical aid. Payment was made for 40,930 accidents, 382 of these being death cases, 2,549 causing some degree of permanent disability, 25,446 causing only temporary disability, and 12,553 involving only medical aid. It is estimated that over 500,000 workmen are covered by the provisions of the Act.

As the disability in serious accidents often continues into and sometimes beyond the following year, complete statistics can only be given for the prior year. These show that about 75 per cent. of the injured workmen were British subjects and 25 per cent. foreign—6½ per cent. being Austrians, 6 per cent. Italians, 5½ per cent. Russians, and 2½ per cent. citizens of the United States.

The average weekly wage of injured workmen was $19.06, and the average age 34.07 years. The total time loss from accidents during the year was 565,526 days; the average length of temporary disability was 21 days.

Machinery caused about 32 per cent. of all the accidents; the handling or moving of objects, 28 per cent., and falls of the workmen, 10 per cent. The most prolific individual causes were saws, which caused 892 accidents; lathes, 891; presses, 813; hoisting apparatus, 785; abrasive wheels, 781; belts, pulleys, chains and sprockets, 390, of which 7 were fatal; planers, jointers, and edgers, 260; shapers, moulders and headers, 121; shafting, couplings, and set screws, 75, of which 6 were fatal. Falls from vehicles caused 260; collapse of support, 276. Hot and inflammable substances caused 1,018 accidents; falling objects caused 1,256, and runaway animals, 98.



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Every Insurance Company makes an allowance on the premium rate for the installation of APPROVED Extinguishers.

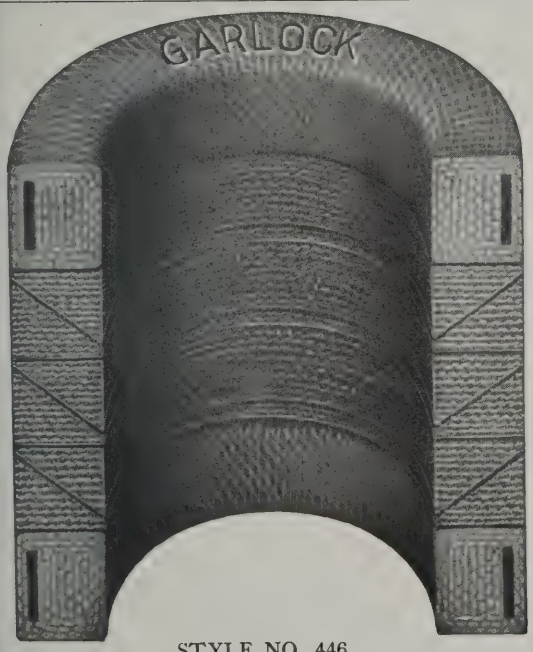
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THE AUSTRALIAN ATTITUDE

Influential trade organ in Australia voices the opinion that certain precautions should be taken to prevent German goods from getting back into the domestic market. The consumer should know what and whence he buys. Manufacturers' agents should be registered.

(From "Australian Hardware & Machinery.")

That a strong feeling exists throughout Australia against the resumption of business with those from whose arrogance and inhumanity the world has suffered so much during the past four years becomes more evident every day. Certain firms have publicly declared their intention to have nothing to do with Germany, especially, until she has purged herself of her rank offences. Stinging refusals were recently sent by two Australian firms of wholesale chemists to a German firm in New York, who had written to advise their readiness to supply certain chemicals. "None of us here want your products, your countrymen, or your communications" was the emphatic declaration with which one of the letters closed. A previous paragraph of a personal character helps to explain the emphasis. "The writer of this is the senior of our firm. His eldest son was a wounded prisoner in your hands, and we know at first hand to what depths of inhuman methods in that direction you can go. The writer's second son, a medical student doing his humane work in the Army Medical in Gallipoli, was killed in the field by your associates, the Turks, who were, until you showed yourselves the bloodiest murderers of Europe, your very fit associates."

Country of Origin Should be Indicated

The question is how it can or should be left to individual preference or patriotism to decide whether they shall buy or sell German goods. No doubt the League of Nations when it comes will lay down broad principles for the guidance of all its members. But even then we shall be free to choose, to prefer, or disparage any goods. Certain precautions are obviously the right and duty of every British community. On every package of goods sold to the consuming public, for one thing, the country or origin should be clearly indicated. The recent amendment of the Sale of Goods Act in Victoria permits of the same regulation being applied to every sale made within that State. In no other part of Australia, nor in New Zealand, is this at present possible. But every Government should introduce such a law. The regulations should provide that the source or country of origin—British, Swiss, German, or Australian—must be clearly shown on every article or parcel sold to a consumer, and (as in the Victorian Act) anything which obliterates or obscures this statement should be made an offence. In other words, the consumer should know what and whence he buys.

Every person (or firm), again, who trades in Australia or New Zealand as the resident or visiting agent of outside manufacturers should be required to disclose his own nationality and the constitution and source of the capital of the firms he represents. This was suggested in our columns some time ago, and the suggestion has been very widely endorsed by representative bodies.

A note printed elsewhere shows that Switzerland recognizes that a commercial invasion is taking place of Germans who are purchasing Swiss businesses, Germanizing them in everything but name, and hoping by this means to avoid the commercial isolation which might otherwise be experienced. Two years ago Germans had purchased 62 per cent. of the water power of Switzerland. A few months ago



Are You Sure it is Right?

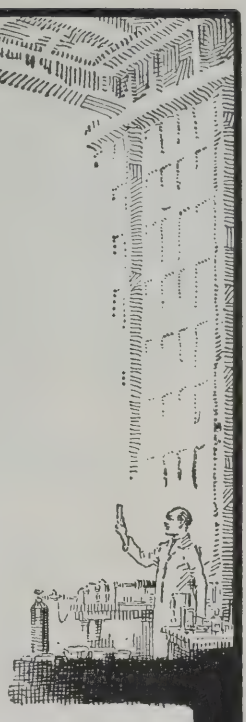
—that oil, water, or even more complex material you are using in your manufacturing? Has it the requisite properties? Are you ***positive*** it is doing what you think it is?

Every manufacturer some time or other has doubts, which, in the interests of his business, he dare not disregard.

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it was indicated that in Spain also attempts were being made by Germans to establish business houses for the purpose of recovering their foreign relations. Another illustration of this sort of thing is a letter in *The Ironmonger*, London, of December 28th last, where a catalogue of high-class machine tools of the Danish Machine Co., Copenhagen, printed in English, is shown by a correspondent to reproduce photographs of machines which before the war were in the catalogue of Alfred Schmahl, of Wotanhaus, Hamburg.

Where Two Countries Are Concerned

In the case of goods which are partly manufactured in one country and partly in another some difficulties arise. Razors forged in Sheffield used to be sent over to Germany to be hollowground, and there were similar cases of manufacturing operations begun in one country and finished or carried a step further in another. Some clear indication of the course to be followed in such cases should be given, but whatever the course the facts should be disclosed. Little hardship should accrue if it were required that such razors, for example, should be labelled: "Manufactured in England; ground and polished in Germany." What possible reason can there be for concealing the actual industrial history of every article unless it it hoped that thereby SOMEONE MAY BE DECEIVED and therefore be more ready to buy?

National Waste

Deterioration and Decay of Property Through Lack of Paint Causes More Loss Than Fire

It is undoubtedly a fact that there is more actual money lost in Canada every year through deterioration and decay in buildings, due to failure to protect property properly and preserve with paint, than accrues from losses by fire.

When it is remembered that fire losses during 1918 amounted to $33,623,000 it will begin to be realized what an appalling loss property deterioration brings and the necessity of grappling with this problem without delay.

The property owner who fails to protect his buildings with fire insurance is considered very shortsighted, and there are few owners who fail to pay their bill for fire insurance premiums regularly. When the property owner pays for protection against fire, he is providing against a possible loss, but if he fails to pay for painting and repainting his property with sufficient frequency to preserve it from decay, he fails to protect himself against certain loss.

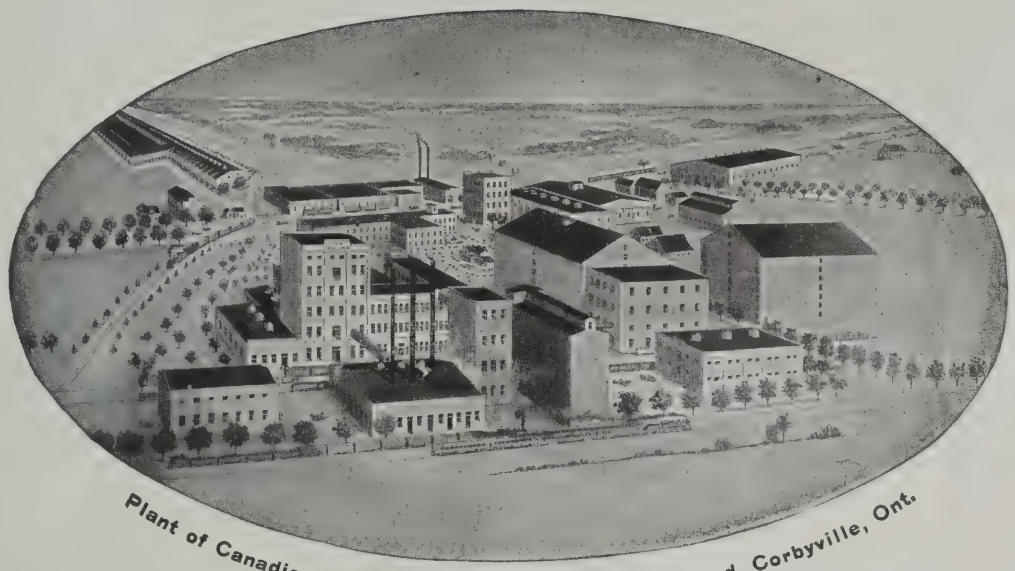
Professor H. H. King, of the State Agricultural College of Kansas, in a letter written April 17, 1916, makes this statement:

"The losses ensuing in this State through lack of paint are much greater than the losses sustained by fire. Paint serves more than the mere purpose of decorating. Its principal value lies in the fact that it prolongs the life of the surface that is painted. Wood and iron exposed to air undergo a slow process of oxidation, which just as surely destroys them as though they were set on fire, the difference being the speed at which the reaction comes."

Obviously—it is most desirable that some definite effort should be made to bring about a condition in the minds of property owners which will insure the application of paint coatings to their buildings with sufficient frequency to protect and preserve them indefinitely from the action of the elements.

Property owners should face the fact that the first and most important purpose of paint is to protect and preserve, while the decorative feature, important and desirable as it is, is nevertheless, secondary.

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Plant of Canadian Industrial Alcohol Company Limited, Corbyville, Ont.

With a capacity of 450,000 (proof) gallons per month we are the largest producers of Alcohol in Canada.

Manufacturers of vinegar, perfumes, essences, pharmaceutical preparations, etc., are invited to write us for prices of Alcohol suitable for their particular line of business.

We make a special feature of contracting for the requirements of manufacturers for the year or season, thus providing not only a uniform cost but also a steady supply as needed.

Those who are using Duty Paid Alcohol in their manufacturing processes would do well to consult us with a view to using it "In Bond," thus avoiding the use of two-year-old Alcohol. Under the rules and regulations of the Department of Inland Revenue, newly made Alcohol may be used "In Bond." This Alcohol is much cheaper than two-year-old.

METHYLATED SPIRITS or Denatured Alcohol is sold only by the Department of Inland Revenue, Ottawa, Ont., but any other kind of Alcohol may be secured from us.

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A SUCCESSFUL CAFETERIA

The cafeteria described, that of Henry Disston & Sons, Inc., was opened last April, and has proved a remarkable success from the start. Cafeterias are now admitted to be practically indispensable adjuncts to modern industrial establishments, and the following description of the Disston cafeteria should prove of value.

By Arthur N. Blum, M.E.

(From "Safety Engineering.")

The British Ministry of Munitions, under Lloyd George, appointed a committee which made a thorough investigation as to the necessity of and advantages derived from industrial restaurants. The report of this committee (*Health of the Munition Worker*, London, 1917) was summed up in the following:

DIRECT BENEFITS

1. Marked improvement in health of worker.
2. Less sickness.
3. Less absence and broken time.
4. Less tendency to alcoholism.
5. Increased efficiency and output.

INDIRECT BENEFITS

1. Saving time of worker.
2. Salutary change from workshop.
3. Greater contentment of worker.
4. Better midday ventilation of workshop.
5. Increase of recreation and games in spare time.

The Government of the United States has followed up these investigations and the consensus of opinion of both private owned companies and Government establishments has emphasized the benefits stated above.

Especially in places more or less distant from town centres, where public restaurants are poor or not available at all, industrial restaurants are regarded at the present time as an absolute necessity and have been actually installed by most factories of repute in this country.

Beneficial Under War Conditions

To characterize further the conditions under which we ourselves approached the subject last year, it suffices to remember that the country was at war and an unparalleled labor shortage, coupled with a ruinous labor turnover, made it imperative to seek means to check both in order not only to reduce the waste in money and energy, but to fill the urgently needed war orders. As shown above, no other welfare undertaking could, under the prevailing conditions, be more beneficial and attractive to the men (and at the same time without any suggestion of charity, which, of course, the men do not want), than a modern factory restaurant. Consequently, the officers of this company decided in October, 1918, to build a restaurant for our men, and instructed the writer to go ahead with the proposition.

A lot, conveniently located to the saw, file and steel works, 200 x 300 feet, fronting Wissinoming Street, Tacony, was dedicated by the company for the purpose.

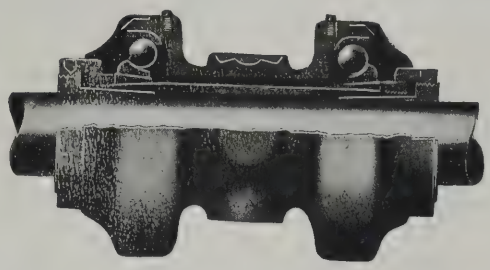
As the first step, we sent out a considerable number of specially prepared questionnaires to factories having modern restaurants in operation, covering details of the building, equipment, and type of service. Coincidently, several special restaurant outfitting firms were invited to quote, and quite a few of the largest restaurants of this character were visited and investigated.

Based on this data we found:

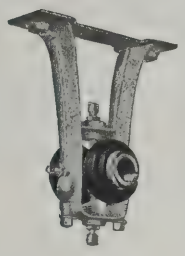
1. That the best type suitable for quick service of large numbers (in fact the only type possible) is the Cafeteria type of restaurant, in which the men serve themselves in



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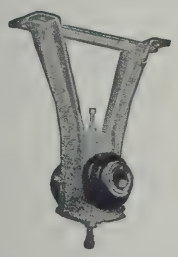
"Yes, They May Be Good, But What Do They Save Me?"

Answer:—There is no "may be" about it.

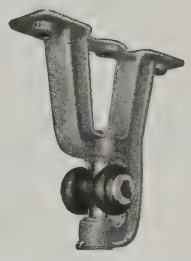
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passing along a counter on which the food is displayed and choose whatever they desire.

2. It was decided that facilities, to start with, for about 600 people in one sitting should be provided.

3. It was decided to erect a new building with a view to finally accommodating about 900 people and having kitchen facilities to prepare 1,500 meals at one time. (This number could be doubled in two sittings.)

These basic data once settled, the preparation of technical specifications was taken in hand. On the face, the further elaboration of the project seemed to be very simple. It concerns an activity known and followed up in every household daily, wherever meals are prepared and served, but if the condition is added that a large number of men have to be provided with food inside of the very short time available during the noon interval, the whole matter loses the aspect of a primitive undertaking and assumes the character of a manufacturing problem, and as such it has been treated by us.

In the first place, it was necessary to secure a permit for the erection of the new building from the War Industries Board at Washington. This permit was issued in a surprisingly short time, passing all the official bureaus in Washington and Philadelphia in less than one week, which again shows what the Government thought of the necessity of such institutions, especially when compared with another simultaneous application for permit for an urgently needed construction in our steel works, which we had pending for nearly six weeks and finally refused, notwithstanding that the steel works had at least 80 per cent war orders on hand.

However, the War Industries Board made it a condition that no steel for either roof or sash should be used in the building, which in turn, in addition to the existing city building laws, at once determined the type of construction as a slow-burning mill construction with concrete foundations, brick walls, tar and slag roof, wooden sash and concrete floor.

The Design Adopted

The floor plan of the cafeteria and kitchen embodies the finally adopted design which is the result of a careful investigation and comparison of numerous layouts of existing cafeterias from which it was endeavored to incorporate in our plan the most desirable features.

Using the basic data mentioned before, preliminary layouts showed that the building had to be 60 x 160 feet with a lean-to of 60 x 80 feet, altogether 14,400 square feet, and an economical construction under the prevailing conditions has been achieved by using the No. 1 and No. 2 of the Austin Company standards, who were awarded the contract. In this type the span of the main building is divided into three equal sections with about 20 foot centres, resulting in a double row of columns in the main dining-room. Posts 12 x 12 and beams 10 x 14 have been used throughout the entire construction.

The main dining-room has a monitor over the centre 80 feet long and 16 feet wide with 100 per cent ventilated mechanically operated 6 feet high bottom-hinged monitor windows. The height of the main dining-room is 16 feet from the floor to the roof sheathings.

The middle part of the kitchen lean-to is 40 feet wide and 24 feet 5 inches high and has two wings 20 feet wide and 16 feet high and is lighted and ventilated from above with monitor windows similar to the one in the main dining-room.

The southern wing, which is used as private cafeteria and private dining-room, covers a space of 20 x 80, or 1,600 square feet.

The northern wing contains store-rooms and the dish-washing department.

On account of the demands made upon us we were obliged to erect an addition to Plant No. 3, devoted exclusively to the manufacture of

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At the western end of the lean-to a mezzanine floor has been erected, used for three independent toilets for the help, with washstands and lockers.

Large windows 14 feet 7 inches wide and 11 feet 5 inches high are provided with double hang sashes covering about 60 per cent of the wall surface with glass.

The kitchen is equipped with all modern labor-saving and sanitary equipments used at the present, and the location of the various departments has been fixed in such a way that the food and provisions follow the shortest possible route from the storeroom, through the preparing departments to the serving counters.

Refrigeration System

A three-compartment refrigerator has been provided in the back of the kitchen—the largest compartment, 8'x8'x11', for meat, and the other two, 6'x8'x11', for dairy products and vegetables. These rooms are cooled by an electrically-driven ice machine. The ice machine is of four-tons capacity "Arctic" and is automatically regulated (Winkler System) assuring uniform temperature in the refrigerator and doing away with the necessity of a special attendant to the ice machine. The machine is started and stopped automatically, controlled by a thermostat placed in the refrigerator.

The refrigerator has the cooling coils placed in overhead bunkers which latter can also be used for ice cooling in case a breakdown of the machine should occur.

Additionally to the cooling rooms, we have provided an ice-making equipment of 600 lbs. capacity per 24 hours. The tank is placed near the refrigerator in order to use the overhead bunkers of the latter as ice storage.

From the refrigerator the meat goes into the opposite butcher room, equipped with an electrically driven Smith meat chopper and an electrically driven Coles meat grinder, and from thence to the adjoining ranges.

Similarly, vegetables from the storeroom are transferred to the vegetable scullery, where an electrically driven Sterling vegetable cleaner is installed, and cooked in an adjoining Morandi-Proctor three-compartment steamer, and V. Clad steam jacketed stock kettles of 40 and 50-gallon capacity.

"Garland" gas ranges have been provided in order to assure cleanliness and do away with the necessity of bringing in coal and removing ashes. In front of the ranges are metal cooks' tables and a large Bain Marie, accessible from both sides, from which rubber-tired trucks on ball-bearings carry cooked food to the serving counters. In this way a consistently short, straight line of motion of the food is maintained from the storeroom to the serving counters.

The pastry bakery, on the south side of the kitchen, is equipped with a Blodgett gas back oven and steam-jacketed copper kettle. The fillings for the pies, as well as the preparing of the dough is done in an electrically driven Day mixer, which also serves as a potato masher, egg beater, and for other various services of the main kitchen and pastry bakery.

A sufficient number of dressing tables are provided inside of the kitchen for the preparation of sandwiches, salads, etc., which are transferred on special trucks to the serving counter. Cutting of meat is done on a U. S. slicer, which in-

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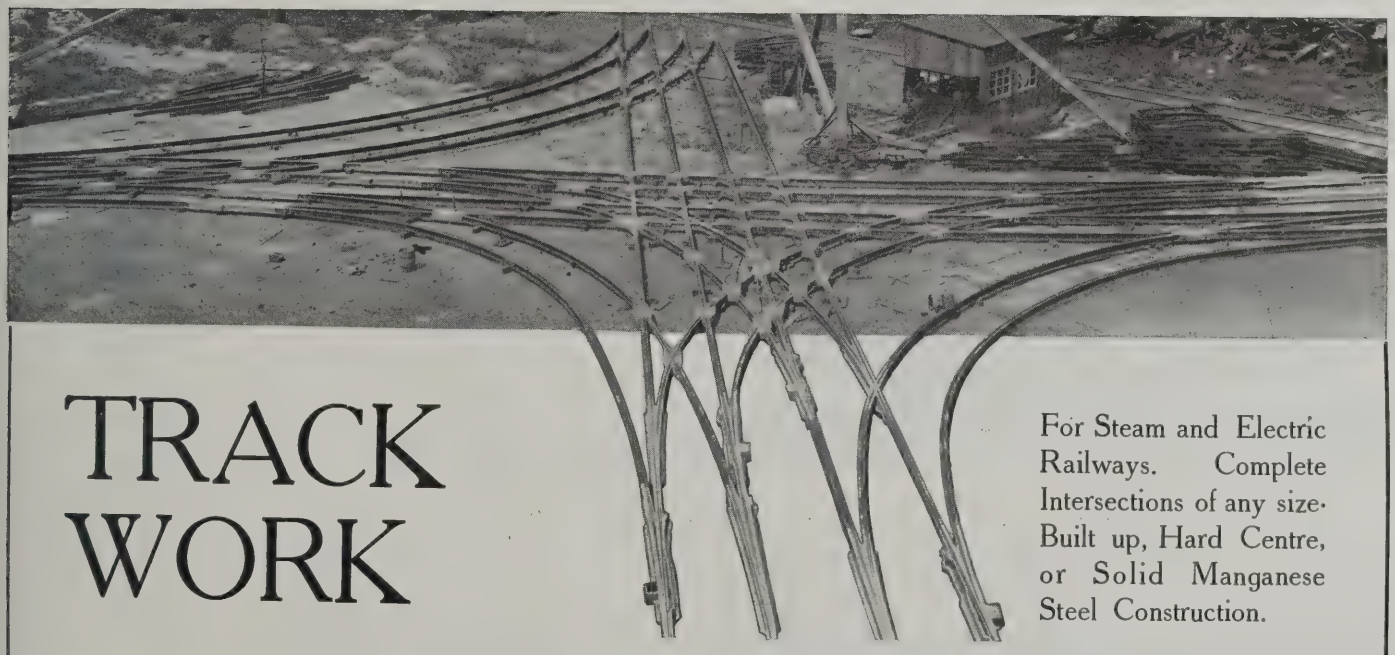
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sures uniformity of the slices, and decreases considerably the labor and waste.

All of the departments are provided with a generous supply of hot and cold water and sinks at convenient points.

The soiled dishes are washed in an electrically operated dishwashing machine of the latest type (Crescent Type EE) capable of washing 5,000 dishes per hour. Dishes are carried to the dish-washing department on special rubber-tired dish trucks.

A separate dish-washing machine is provided for trays and silver, which also can be used in emergencies as a stand-by to the automatic machine.

Ample storeroom is provided for both provisions, utensils and china, and the storerooms are arranged in such a way that the manager of the cafeteria has them continuously under supervision as well as the entrance and exit to the kitchen, from his office seat.

A potato pit, holding about two carloads of potatoes, is provided under the storeroom and has a loading hatch from the outside.

Kitchen Equipment

The kitchen is provided with high pressure (90 and 40 lbs.) and low pressure (5 lbs.) steam; electric service, 110 and 220 volts A.C. 60 cycles, for lighting and power; gas, and water service. A separate mill supply for the sprinkler system will be installed shortly. The steam and electric supply is carried through a tunnel under Wissinoming street from our factory.

Very important to the success of the cafeteria is the proper arrangement of the dining-room. This will be at once apparent if it is considered that there are practically 24 hours available for the preparation of the food in the kitchen, whereas only about 30 minutes for the distribution of same to the men.

Quick service and absence of confusion are the slogans of the proposition.

As stated above, the most advantageous position for the service counter, admitting the shortest line for the food route, was to place it in front of the kitchen and in the centre of the dining-room. The serving counters, so situated, can be arranged in two ways; either parallel to the long side of the building or across same. The second alternative has the following advantages over the first: It gives a straight run for the food trucks from the kitchen. It allows more space alongside of the building for the waiting line of men and it quite considerably reduces the number of help necessary inside of the service counter, especially after the first rush is over, when both sides can be operated with reduced number of help for both counters. Also, it allows for a single coffee service and a single cash register service after the rush is over. These advantages have decided us to adopt this latter method.

Some Helpful Features

As seen on the plan, the service counter has all steam tables with dish warmers doubled on both sides in order to dispatch the service. The trays and silver are replenished through windows in the walls of the kitchen, which is a helpful feature during the rush period.

Articles like ice cream, milk, cigars, candy and other refreshments which are liable to be taken by the men and women independently, are dispensed over a special counter near the exits. In such a way the main service counter is relieved.

Another question of importance was to decide the method of paying for the food and, after careful investigation, it was

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found that the best way is to have a sufficient number of cashiers, patrons to pay as they leave the service counter.

The other possibility, of using checks, received at the service counter and paid at the exits, has disadvantages in our case, as it would necessitate a special kind of checks for the men who buy only at the cigar and ice cream counter, and consequently impair the control.

A further problem was to determine whether chairs, stools or benches were to be used. The stools proved the most advantageous, as they once for all fix the space which the patron can occupy; also take up the least room and do not obstruct the aisles.

To facilitate the service the patrons are required to place their soiled dishes and trays on special trucks conveniently located. These trucks, when filled to capacity, are wheeled to the dishwashing department by the help.

A description of the cafeteria will not be complete if the means and provisions for proper health and sanitation are not mentioned. An industrial restaurant which has to dispense a limited choice of food to a very large number of men must be so arranged that there is a practical certainty that conditions detrimental to health do not occur and that the food be served clean and attractively.

With this object in view, we have provided all practical means to assure sanitation and cleanliness of the restaurant.

The ventilation of both the dining-rooms and kitchen is taken care of by large monitors, 100 per cent. ventilated; also two-thirds of the glass surface of the windows is ventilated. The windows reach up to the ceiling and so eliminate impure air pockets.

A generous net of drainage has been provided, with vents and grease traps where necessary, and the concrete floor will be flushed with water at frequent intervals. A sanitary cove is provided around the walls. All counters are raised 6" above the floor to insure ventilation and easy cleaning, and the walls have been painted with water-proof oil paint, to be flushed at the same time as the floors. The interior is painted with mill white, with dark green wainscoting.

The toilets, lockers and wash facilities are provided in a mezzanine floor, western end of building, away from kitchen.

The drinking water is cooled by the ice machine and dispensed through an improved type of bubbling fountains which have a protected nozzle and an inclined flow of water. Recent bacteriological investigations at the University of Minnesota have shown that the generally used bubbling fountains with vertical water streams are unhygienic and direct propagators of diseases.

Identical principles have prevailed in construction and equipment of the small private cafeteria.

Electrical Precipitation

A booklet illustrating their apparatus for the suppression of dust and fumes and the recovery of waste materials in the operation of many industrial enterprises has been issued by the Canadian Westinghouse Company, Limited. The method adopted is electrical precipitation. This process is now being used successfully in lead and copper smelters to reduce metal losses from the stacks and to eliminate smoke nuisances; in cement plants to collect potash and cement dust; in acid plants to recover acid fumes; and in rock crushers to suppress the dust nuisance. It is also being applied to iron blast furnaces to eliminate the ore dust and to recover potash values; to gas plants for removing the dust, tar and lamp black from the gases; to locomotive roundhouses and power plants, located in centres of population, to remove the soot and cinders from the smoke; and to industrial processes producing fine powders as in the manufacture of lamp black, zinc oxide, desiccated foods, etc. The booklet describes the process in detail and gives a large number of illustrations.

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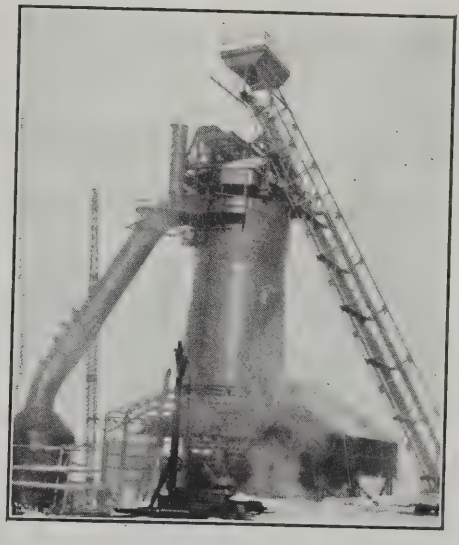
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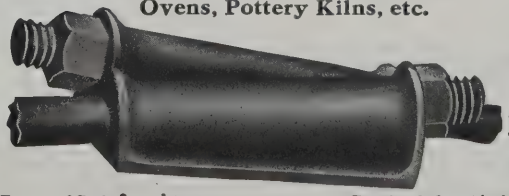
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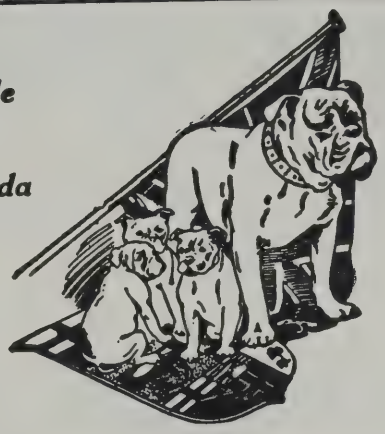
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WHAT FRANCE NEEDS TO-DAY

Seven million tons of metals are required for the work of reconstruction, including 1,500,000 tons of iron and steel, 80,000 tons of copper, 40,000 tons of lead, and 90,000 tons of raw cotton for textile plants.

(From the "American Machinist.")

Speaking before a gathering of American business men, Lieut. Raymond d'Aiguy, of the French High Commission to the United States, gave the following information about France's needs and the way to fill them. Said Lieut. d'Aiguy: "The greatest need in France at the present time is food and agricultural implements, and she is looking to America for both of these. The import duty on agricultural implements has been temporarily suspended as an inducement for American manufacturers to ship their products to France. During the war France lost 300,000 agricultural implements.

The speaker sketched quickly and precisely the far-reaching effect of German destruction in France. According to figures he quoted, the destruction includes 27,000 factories, representing an investment of $5,000,000; 440,000 homes, 3,000 miles of railway-track, 1,000 bridges, and 400 tunnels.

To aid in the reconstruction of these, France will have to import quickly 7,000,000 tons of metals. The requirements for the next year are estimated at 1,500,000 tons of iron and steel, 80,000 tons of copper, 40,000 tons of lead, and 90,000 tons of raw cotton for textile-plants.

"France looks to America to help in the reorganization of her industrial life," said Lieutenant d'Aiguy. "We need American engineers to help reconstruct our plants and American business experts to help us reorganize French business. I believe that France will become more of a modern machine-using nation than before the war. America can help in showing French business men the advantages of machine production.

"France is suffering from a shortage of machine tools now, but in order to assure a certain amount of profit for France in any importations, they must be bought through a special government body, which exacts a 16 per cent. profit for France as well as an extra 2 per cent. for the upkeep of this special organization.

"Above all things, France needs ships, and we hope to be able to place orders in American shipyards for about 1,000,000 gross tons of shipping.

"France is not bankrupt, but she has lost much through the war. In making our purchases in America we will be able to pay for about half of the merchandise we buy. American business men will have to extend us credit for the other half.

"American business men who want to do business in France should conduct negotiations through a Frenchman of a French firm,' Lieutenant d'Aiguy insisted. "The French and American people are not at all alike. It takes a Frenchman to understand his own people."

Arthur J. Hayes, former sales manager of the Ford Motor Co., of London, Ont., has resigned to go to Windsor, where he becomes sales manager of the Champion Spark Plug Co. of Canada, Limited. Prior to taking up his new duties, Mr. Hayes spent a few weeks travelling about Canada, getting acquainted with the jobbing trade and familiarizing himself with the sales policy of the company. He will make his headquarters at Windsor, where a new quarter of a million dollar plant is being erected by the Champion Spark Plug concern.



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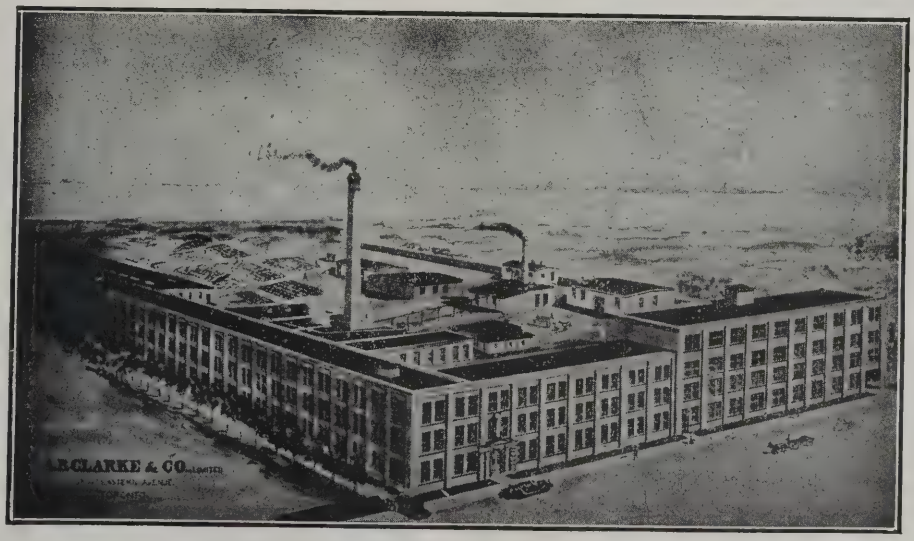
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THE INDUSTRIAL AWAKENING OF P.E.I.

Rural depopulation is the worst menace to Prince Edward Island's prosperity and, to offset it, the introduction of industries is advocated. An Industrial Promotion Committee has been formed and investigation is being made of possible industrial development. At present the island has practically no manufacturing industries but it has plenty of raw material.

(From the Montreal "Journal of Commerce.")

According to the last census the population of Prince Edward Island decreased by 15,000 during the previous decade, and we had fewer people then than at Confederation. The great problem is how are we to keep our people at home and save a further loss in population. Agriculture is the chief industry of the island, employing about 85 per cent. of our people. Take a case of the owner of an average-sized farm. If he has a number of sons, only one of these, or perhaps two, can earn a livelihood on it. The others must seek employment in other callings, usually outside the province. Even the farmer, attracted by the lure of the West, sells out and moves away.

Efforts have been made to develop intensive farming through dairying, fruit-growing, etc., and thus increase the sources of employment and maintain at least our population, but the results have not been so satisfactory as desired. Dairying has made good progress, and according to the reports submitted at the annual meeting of the Provincial Association this winter the value of the output was the greatest on record owing to the high prices; but the supply of milk had decreased, and there was a cry of shortage of farm labor. The fishing has been holding its own well, but the lobster catch shows signs of declining, and unless other branches of this industry are more vigorously prosecuted, such as cod-fishing, which is capable of much greater development, there will naturally be a falling off in the number of people engaged in this industry. Fur farming, though hard hit by the war, has passed the feverish speculative stage, and is settling down to a sound business basis, and this will hold a certain number of our population.

Great Need is New Industries

The great need of the province is the introduction of new industries as well as the further development of the existing ones, and a move is now on tending to secure the greatly-to-be-desired indoor industries, such as factories.

Whilst the island is enjoying a good share of prosperity, and agriculture and fishing have proved valuable sources of wealth, our progress has been one-sided from an industrial standpoint. There are a number of anomalies in the situation. For instance, we export about 30,000 raw hides per year, and these are sent abroad to be manufactured into boots and shoes, and to be sold on the island. Eighteen or twenty years ago we had several tanneries operating successfully, but they have all closed down but one, and that one is on the verge of disappearance. Hence tanneries and boot and shoe factories should, in the natural order of things, be established here. There is not now a single one of the last-named factories in operation, although one is proposed to be started here on a small scale.

Import Almost Everything

The island is a regular Mecca for commercial travellers, as we import almost everything in the line of manufactured goods. The manufacture of carriages, furniture, woollen goods and other lines at one time flourished, but one by one they faded away. With the view of recovering at least in a measure some of our lost ground, an organization known as the Industrial Promotion Committee has been found in Charlottetown. Its membership includes the Council of the Board of Trade, the City Council, the Rotary Club, the Retail Merchants' Association, and the Great War Veterans' Association. There are a number of sub-committees, including the Investigation Committee, whose duty is to investigate

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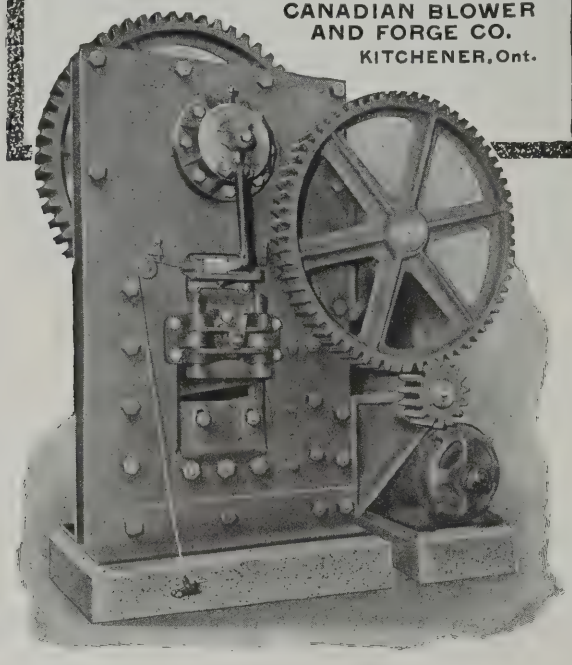
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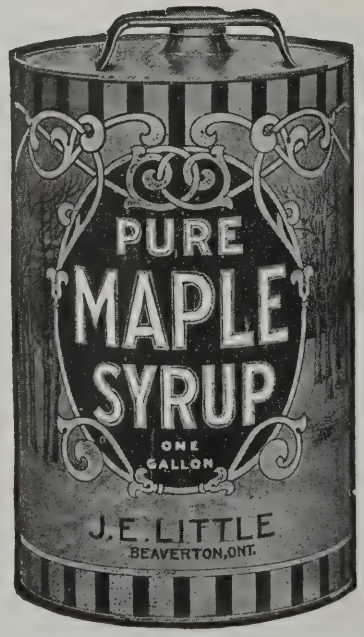
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and report on existing industries, and the prospects for new enterprises; and a Recommendation Committee, that will receive in confidence the financial report of any enterprise wishing to extend its field of operation or any new industry, and make recommendation as to the proper method of procedure. The Publicity Committee is planning an advertising campaign, and recently conducted a competition in which prizes were awarded for the best articles on the securing of new industries. Although the movement is in its initial stage, good progress has been reported. One firm of machinists and founders, who make a specialty of gasoline engines, propose enlarging their premises, and are preparing to issue additional stock. The prospective establishment of several new industries is announced. The large sums which were taken out of the Savings Banks and invested in the fox industry and the several Victory Loans indicate that there is a large amount of capital which only requires the proper inducement to have loosened up and placed in circulation, and the aim is now to develop a confidence among our own people in home industry.

Manufacturing Conditions Favorable

There are many favorable conditions for manufacturing here. Formerly the island was handicapped by inadequate transportation facilities, especially in winter, but the arrival of the car ferry and the widening of the railway gauge which is now under way will make us virtually a part of the mainland. Although we have no coal, Ontario and Quebec are also without it, and we are within easy reach of the mines of Pictou County and Sydney, so that it can be landed here just as cheaply as in St. John. The island is thickly settled with a well-to-do people, whose wants at present are almost wholly supplied from abroad. Building sites can be had reasonably, and the cost of living will be no higher than in other provinces, whilst the rate of taxation is the lowest of any part of Canada. Quite a flood of suggestions has been placed before the Promotion Committee; for example, making of certain lines of agricultural implements is advocated, the building and starting of woollen mills (already we have a knitting factory in successful operation), the utilization of fish offal for fertilizer, the canning of fruits and vegetables, the bottling of pickles, the manufacture of soap, the building of boats, and making of motors and aeroplanes and other lines. For some years the beet sugar industry was insistently advocated. The scheme finally dropped, but an agitation is on foot to have it revived.

Much emphasis is being laid upon the possibilities of developing industries which are in line with our natural resources. For example, the manufacture of potato starch, which has been carried on for a number of years, might be supplemented with the making of potato flour, dextrine glucose and denatured alcohol. A condensed milk factory has been running for quite a number of years, and the making of powdered milk might be introduced also.

An organization known as the Development Commission, which received support from the Government, undertook some years ago to do work along somewhat similar lines as the Promotion Committee, and it secured considerable amount of data, which can be made use of by the latter organization. The Commission, however, became inactive when the war broke out, but now that conditions are becoming normal again it is hoped that the organization may be revived. The manufacture of bricks and tiles for under-drainage resulted from the efforts of that committee, and it was also found that the island has a large supply of sand suitable for glass making. Other hitherto unknown resources of possible development were revealed, but now that the industrial movement is being revived some practical results may follow the efforts which were previously put forth.

The need of providing employment for the returned soldiers has tended to quicken the interest in the industrial movement, and, with the various forces working together, it is expected that something tangible will result.

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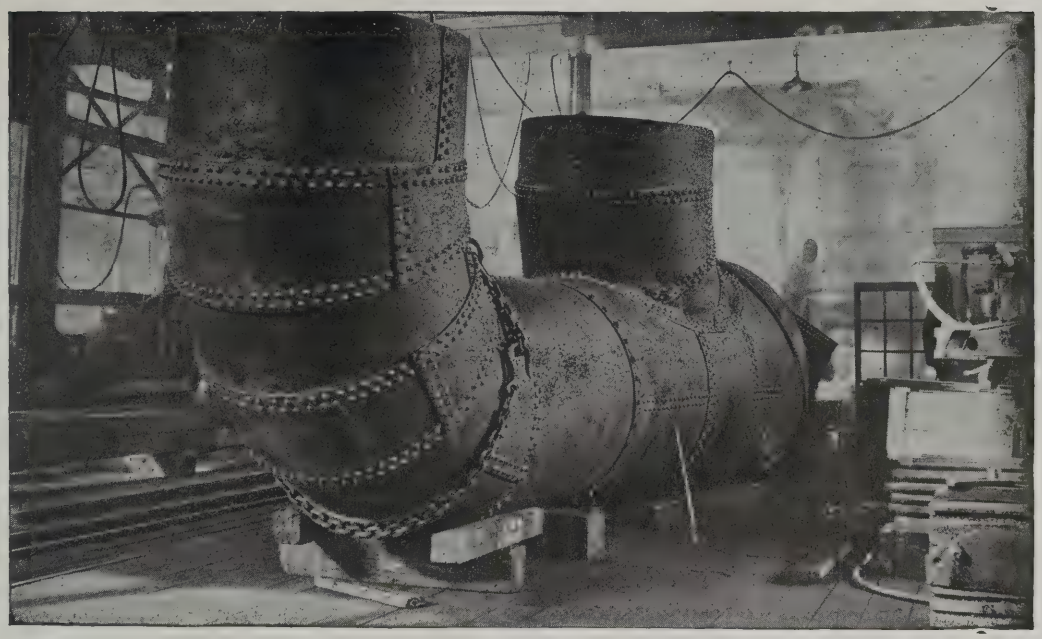
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GERMANY'S INDUSTRIAL FUTURE

The length of time before Germany can even approach her previous standing is dependent upon many things. There is little doubt, however, but that the German people will exhaust every means and source to re-establish themselves as rapidly as possible. They will doubtless endeavor to regain the respect of the world by new and possibly surprising means.

By Corporal R. D. Zucker.

(From the Journal of "Industrial and Engineering Chemistry.")

Germany's entire industrial position depends largely on her ability to get raw materials. The sources of my information are several, the principal ones being my personal observations of mail censorship reports, of Germany's industrial position, of which I prepared daily summaries for a period of several months, and also my personal observations in various parts of the occupied territory. I have hesitated in making any fast, prophetic statements regarding the future, and have confined myself principally to the various possibilities.

Germany's dependence upon other countries for so much of her raw materials has placed her in a precarious position. She has no important copper, tin or nickel deposits. Whereas before the war she led the world in the production of aluminum, now the United State alone produces over one-half. We and Canada have a natural advantage over her in our large deposits of bauxite. Previously Germany imported vast quantities of it from the Provence district in France. It is doubtful if she will be able to do this in the future, because agitation is already on foot in France for the Government to make stricter export laws on this material. She can obtain lead in fairly large quantities from galena deposits in the Harz mountains, Mechernich and Call, in the Eifel district. Zinc is very plentiful in the Upper Harz, and in Upper Silesia and Aachen. Formerly Sweden exported about three million tons of steel every year to Germany. Naturally this was greatly diminished during the war. Now even the production of Germany's own mines amounts to very little. Cotton, rubber, gums, essential and vegetable oils must also be imported in large quantities. Flax is cultivated to some extent in Germany, but at the present time only about five to six per cent. of the mills of the linen industry are in operation. This year's crop of flax will amount to practically nothing. Seed is difficult to obtain, and the farmers are not planting much because they can see no method of disposal, and in many cases no labor can be had.

Want Raw Materials

I read in one trade journal that, on account of the great oversupply of copper, cotton, rubber, textiles, etc., in the United States, we would be compelled to export them to Germany in order to dispose of them. They evidently expect the exports to commence with the lifting of the blockade, and also look for a big reduction in prices. They particularly mention that they want to import the raw materials and not the manufactured goods. This is so that their idle plants may once again be set in operation and employment given to those out of work.

Transportation difficulties arose from many different sources. The blockade between the occupied and the unoccupied territories, enforced by the Allied armies of occupation, played a big part, especially during the first months of occupation, when it was extremely difficult to obtain permits to export and import necessities, etc., from the left Rhine territory to unoccupied Germany, and *vice versa*. Later on the restrictions on certain raw materials and special classes of goods were made lighter, and it was possible for some plants to keep in operation through these means. For example, at one time a large quantity of raw beet sugar was permitted to be sent from the unoccupied zone to the left Rhine territory, where most of the refineries are located. It was on the

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condition that a certain large per cent. should be kept for distribution in the occupied country. Another factor in the transportation trouble was that of the diminution in the amounts of rolling stock. Owing to the conditions of the armistice, 5,000 locomotives and 150,000 cars had to be turned over to the Allied authorities, and the shortage produced thereby added greatly to the already existent difficulties. It is claimed, however, that after the industrial plants start up again the shortage of locomotives could be alleviated in as short a time as three months by means of spare parts on hand, outstanding contracts, etc. This seems to me a very optimistic statement.

The spread of Bolshevism and Spartacism caused considerable turmoil among the laboring classes. Naturally the leaders of these new parties sought the districts where labor was most concentrated, and therefore the mining regions around the Ruhr River, Upper and Lower Silesia, and other industrial centres suffered the most, thereby further paralyzing the arteries of commerce. The demands for higher wages, better hours and conditions were in some cases just; but the harm done to industry alone by their injudicious methods certainly adds the final touch to their discredit. For many months, in Berlin alone, there have been well over 200,000 unemployed. The Government itself is greatly to blame for this, because, by law, they are compelled to pay those out of work eight marks per day, I believe; and when a man is unable to earn much more than that by working, there is certainly little inducement to make him hunt a job if he can get his living free and by thieving or plundering. A readjustment of these unfavorable conditions can be partially obtained by suppressing the Bolshevist menace by the co-operation of all, and with the course of time. It can be safely said that the majority of the workers are not in favor of the radical methods used, but where intimidated and compelled to adopt them.

Socializing the Industries

Many movements have been on foot for the past months to socialize the different industries. The German Government is making investigations concerning the benefits of it; and some branches of industry, I believe, have already decided to adopt the socialistic administration. Others are putting up a violent opposition to it, so the outcome of it will be interesting to watch. There has been existent in Germany for a long time a type of organization which, until comparatively recently, we have not had to any extent in our own country. Every little branch of industry has its so-called "Verein" or "Verband," which seems to be made up more from the manufacturers themselves than from the laboring classes. They are not similar to our trade unions, but are more along the order of our "chambers of commerce." They aim mainly to standardize commerce regulations, determine prices, establish co-operation with the employees, protest against unfair legislation, and to look out generally for the particular interests of their own branches of industry. They are in a large degree responsible for Germany's previous commercial success. Since the armistice was signed they have also played an important part in endeavoring to keep industry going and in making plans for the future. It might be mentioned here that another feature that played a part in Germany's former success was that of the elimination of "cross shipping," i.e., the shipping of some class of goods from one part of the country to another distant part when it is possible to obtain the same in close proximity. This avoids unnecessary congestion of freight, and affords cheaper prices, quicker delivery, etc. Of course Germany, being of much smaller area than the United States, can more easily practise such a principle; nevertheless, I believe that we should make attempts to eliminate this drawback as much as possible in the United States.

At the present time the immense syndicates and their vast plants are shut down exactly as those of smaller capacity are. Probably among the best generally known is the famous "Kali" syndicate, which controls the potash deposits of the Stassfurt

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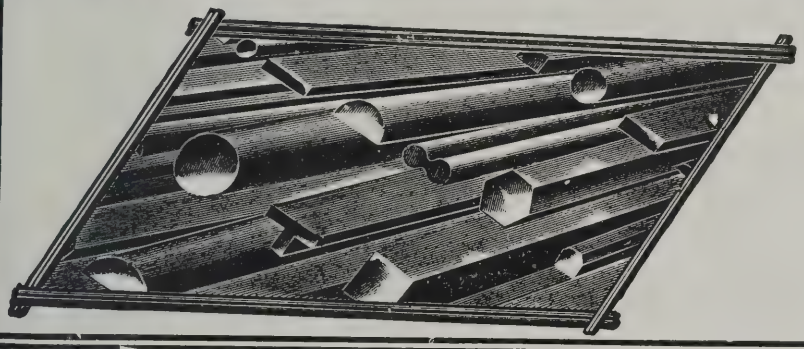
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region. During the first quarter of 1919, on account of coal shortage, transportation troubles and labor difficulties, they were able to deliver only 60,000 tons, compared with 150,000 tons in the same period of 1918. The value of deliveries decreased from 77 million marks to 35 million marks. Now that the United States has become practically independent of large imports of potash, whereas in 1913 it is said that she imported about one million tons of potash salts from Germany, it can be seen that this important branch of Germany's export trade is doomed to suffer. In like manner, through the industrial independence which we have obtained in other lines during the war, especially in medical preparations, dyestuffs, optical glassware, etc., her position is greatly jeopardized. One plant of the Hochst Farbewerke, in French-occupied territory, is now in operation under French supervision. Medicinal products are produced, the stores and production are first used for the purposes of the Allies, and any remainder can be shipped by special permit into the unoccupied territory. Along the Rhine, in the American zone, practically the only factories in operation are those manufacturing "Schwemmstein," a sort of porous concrete building brick made from gravel and clay found in the immediate vicinity. Being on the river, a coal supply is fairly easily obtainable. These plants have been making shipments with fair regularity, especially to Holland, which is also accessible by the water route. It is interesting to note here that after the American army of occupation had been here some time the numbers of unemployed among the Germans in the occupied zone decreased continually until, at the present time, it is very nearly nothing.

Krupp Works Idle

In the hills along the Lahn River, which terminates in French-occupied territory just below the American zone, there are a few silver, lead and iron mines. These have been in operation to some extent, but with no regularity and with only a small production. The great Krupp works at Essen, while having made plans to re-establish themselves on a peace basis, are the present practically idle. It is interesting to note that the Krupp people claim that before the war the proportion of finished war materials (artillery, armor plate, shell cases, etc.) to that of peace materials which they manufactured was only one to twenty. It is not within the scope of this article to argue along these lines, but I have definite proof that the Krupp people cause false statistics to be given to the public, and reserve the correct ones for their own internal administration. The addition that they will soon put on to their 1912 Jubilee Book concerning their experiences, production, etc., during the war will not be the same one that they will distribute to their own officials, and which will contain the true facts, figures, their great errors, etc.

The majority of the plants are in condition to start manufacturing again on short notice if the factors that closed them down are removed, that is, with a regular coal supply, which would, of course, necessitate open lines of transportation, and the labor trouble quieted, Germany will be able to manufacture on a scale in proportion to the supply of her own raw products and the disposal of her goods. Here her total dependence on other countries for such products as rubber, copper, etc., comes into effect. She is also largely dependent upon other countries for the disposal of much of her manufactured goods, and will no doubt make every effort to introduce her wares to the world once again, whether it be by open methods or unscrupulous ones, depending upon whether the former are successful or not. Importers are already sending out

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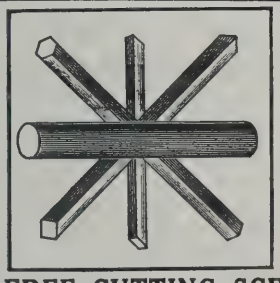


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smooth business letters, seeking to renew connections and dismiss the "unfortunate occurrences," as they call it, of the past four years. English firms have their representatives in a portion of the occupied territory, where they are aiming to establish business connections. I understand also that a large American exchange company has offices in Berlin, and will handle imports of raw materials and exports of finished products to the States. It is doubtful if the antipathy against Germany will remain strong with many in the commercial world, especially if there is anything to be gained by overlooking it.

The length of time required before Germany can even approach her previous standing is dependent upon many things. If the amount of indemnity that she has to pay should prove to be excessively large, the country would be placed in a condition of economic slavery for many years. If a commercial boycott of any extent should be placed upon her, this will certainly be a tremendous restraint upon her recovery. There is little doubt, however, but what these people will exhaust every means and source to re-establish themselves as rapidly as possible. Being naturally industrious, and making application of science as they have heretofore, they will doubtless endeavor to regain the respect of the world again by new and possibly surprising means, especially if they should be fortunate enough to have the proper kind of leaders to guide them. Plans for the future are already being considered in detail. If attempts to place their goods in the large countries of the world cannot be made directly, they will resort to agencies which they have established in the so-called neutral countries, such as Holland, Switzerland, Sweden, Norway, Denmark, etc. Many firms already have their representatives in these countries, and are making preparations for importing and exporting as soon as the blockade restrictions are lifted.

One thing which Germany fears in a commercial way is the competition of Japan. Since 1913 Japan's exports to Australia alone increased eightfold. There is a bitter feeling against them on account of the strides that Japan has taken in the export of toys, fancy wares, etc., to the United States, South America, Australia and Europe. The fact that Germany, being closely engaged in warfare, gave Japan an excellent opportunity to expand her business connections, now causes Germany to apply the term "yellow peril" to the menace to her toy industries, etc.

A fact which must not be lost sight of in the future is the well-known ease by which a plant manufacturing dyestuffs can be converted, in a very short space of time, into a source for the most powerful explosives that the world knows of. It will be well to watch this formerly highly-developed branch of Germany's industry, and not allow it to reach too extensive proportions.

It is perfectly possible, although perhaps difficult for some to understand, for Germany to rebuild herself and become once more a nation of commercial importance and holding the recognition of the great nations of the world. It will take many years and an entirely different type of leaders from what she formerly had, and at the present time it does not appear as if her new leaders had lost sight of their old ideas of world domination in the future. So far as the United States is concerned, we have been very magnanimous to her on the whole, which is entirely in keeping with the principles for which we fought. If Germany, in her strides for recovery, shows herself worthy, I believe it would still be in accordance with our principles to assist her in certain ways; but if, on the contrary, she should show any intent of pursuing her old designs, forces to prevent it cannot be taken too soon. Present internal indications in Germany certainly indicate that she is anxious to re-establish her business connections, start up the factories, feed her people and put herself on a firm basis. Germany's future rests wholly with herself, and, by watching her carefully, the rest of the world will be able to determine what new means to adopt towards her judicially, commercially and, if necessary, physically.

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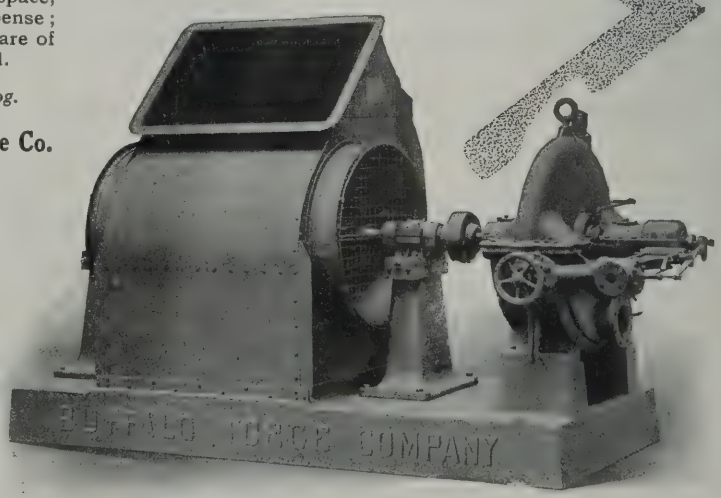
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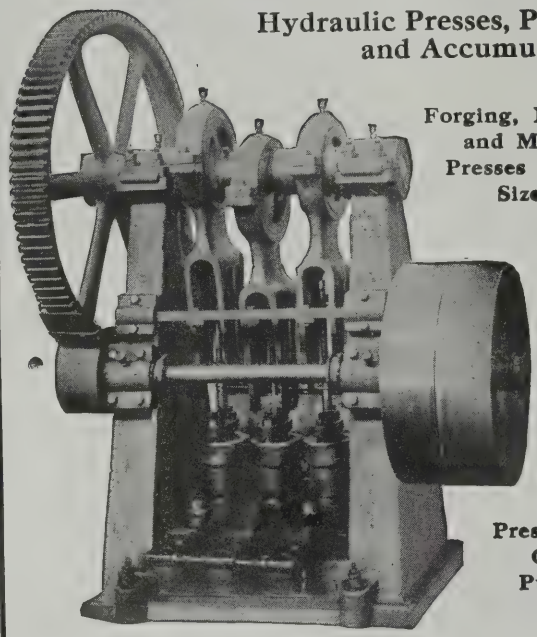
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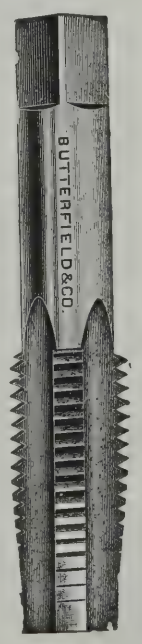
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WOMEN'S AND MEN'S WAGES COMPARED

The subject of the relation of women's to men's wages is dealt with in a report recently submitted by a committee appointed last September of the British War Cabinet. The task imposed upon the committee was to investigate and report on the relation which should be maintained between the wages of women and men having regard to the interests of both as well as to the value of their work.

(Summary in "Manufacturers' News.")

The report contains a mass of historical and statistical information on the employment and wages of women, both before and during the war, with especial reference to the comparative efficiency of women and men, and their comparative earnings. Five out of the six members of the committee signed the majority report, namely, Lord Justice Atkin (the chairman), Dr. Janet Campbell, Sir Lynden Macassey, Sir W. W. Mackenzie, and Sir Matthew Nathan. One dissenting member, Mrs. Sidney Webb, signed a minority report. The work of the committee covers a wide field of detail relating to the question of equal pay for equal work, and has been conducted with a view to striking a fair balance in the scale of justice and fairness regarding the compensation of the vast army of women workers that have joined the industrial forces of Great Britain since the war began. The questions considered are no less important because of the return of peace. They are rather of greater consequence, since the total of women engaging in various kinds of labor heretofore performed almost entirely by men is now far greater than ever before. Following are the recommendations of the British committee:

Relative Value of Men's and Women's Work

Principles that should govern future relation between men's and women's wages:

(1) That women doing similar or the same work as men should receive equal pay for equal work, in the sense that pay should be in proportion to efficient output. This covers the principle that on systems of payment by results equal payment should be made to women as to men for an equal amount of work done.

(2) That the relative value of the work done by women and men on time on the same or similar jobs should be agreed between employers and trades unions, acting through the recognized channels of negotiation, as, for instance, trade boards or joint industrial councils.

(3) That where it is desired to introduce women to do the whole of a man's job, and it is recognized that either immediately, or after a probationary period, they are of efficiency equal to that of the men, they should be paid either immediately, or after a probationary period, the length and condition of which should be definitely laid down, the men's time rate.

(4) That where there has been subdivision of a man's job or work, without any *bona fide* simplification of processes or machine, and a women is put on to do a part only of the job or work, the wages should be regulated so that the labor cost to the employer of the whole job should not be lessened, while the payment to the persons engaged on it should be proportioned to their respective labor contributions.

(5) That where the introduction of women follows on *bona fide* simplification of process or machine, the time rates for the simplified process or simplified machine should be determined as if this was to be allocated to male labor less skilled than the male labor employed before simplification; and women, if their introduction is agreed to, should only



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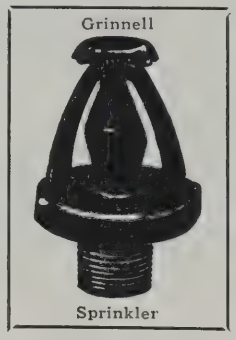
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receive less than the unskilled man's rate if and to the extent that their work is of less value.

(6) That in every case in which the employer maintains that a woman's work produces less than a man's, the burden of proof should rest on the employer, who should also have to produce evidence of the lower value of the woman's work to which the fixed sum to be deducted from the man's rate for the particular job throughout the whole of the industry should strictly correspond.

(7) That every job on which women are employed doing the same work as men for less wages should be considered a man's job for the purpose of fixing women's wages, and the wages should be regulated in the manner above recommended.

That (8) the employment of women in commercial and clerical occupations especially requires regulation in accordance with the principle of "equal pay for equal work."

(9) That in order to maintain the principle of "equal pay for equal work" in cases where it is essential to employ men and women of the same grade, capacity, and training, but where equal pay will not attract the same grade of man as of woman, it may be necessary to counteract the difference of attractiveness by the payment of married men of children's allowances, and that this subject should receive careful consideration from his majesty's government in connection with payments to teachers to which the government contributes.

(10) That the principle of "equal pay for equal work" should be early and fully adopted for the manipulative branches of the civil service, and that in the case of post-office duties the question of the men having late hours or night work should be provided for by an extra allowance to persons undertaking common duties under disagreeable conditions.

(11) That this principle with regard to allowances to persons undertaking common duties under disagreeable conditions should be applied also to industry.

Recommendations Looking to the Future

Principles that should govern future employment and wages of women:

(15) That in those trade processes and occupations which the experience of the war has shown to be suitable for the employment of women, employers and trade unions, acting through the recognized channels of negotiation, should make possible the introduction of women by agreements which would insure, in the manner above indicated, that this did not result in the displacement of men by reason of the women's cheapness to the employer.

(16) That with a view to improving the health and so increasing the efficiency of women in industry:

(i) There should be a substantial reform and extension in scope of the factory and workshops acts, with special reference to (*a*) the reduction in the hours of work (including arrangement of spells and pauses, overtime, night work); (*b*) the provision of seats, labor-saving devices, etc., to avoid unnecessary fatigue; (*c*) an improved standard of sanitation (sanitary conveniences, lavatories, checkrooms, etc.), ventilation and general hygiene; (*d*) the provision of canteens, rest rooms and surgeries; (*e*) the general supervision of the health of the workers, individually and collectively; and (*f*) the conditions under which adolescents should be employed;

(ii) The present factory medical department at the home office should at once be strengthened by the appointment of an adequate and suitable staff of women medical inspectors of factories, and that a considerable increase should be made to the present staff of lay women factory inspectors;

(iii) A local factory medical service should be established, with duties of supervision, investigation and research intimately co-ordinated with the school medical service, under the local education authority, the public health service, under the local sanitary authority, and the medical service, under



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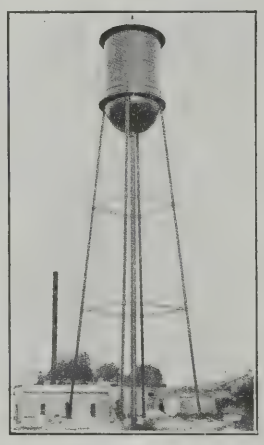
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the national insurance act or ministry of health, when established

(17) That the ministry of labor, with which should rest the duty of ascertaining both nationally and locally the demand for trained persons in any trade or occupation, should, through central and local trade advisory committees, assist local education authorities in determining the technical instruction which should be provided for women:

That (18) in order to secure and maintain physical health and efficiency, no normal woman should be employed for less than a reasonable subsistence wage.

(19) That this wage should be sufficient to provide a single woman over 18 years of age in a typical district, where the cost of living is low, with an adequate dietary, with lodging, to include fuel and light in a respectable house not more than half an hour's journey, including tram or train, from the place of work, with clothing sufficient for warmth, cleanliness, and decent appearance, with money for fares, insurance and trade union subscriptions, and with a reasonable sum for holidays, amusements, etc.

(20) That there should be additions to this wage for women working in the larger towns and in London, to cover the greater cost of living there.

(21) That this wage should be adjusted periodically, to meet variation in the cost of living.

(22) That the determination of the basic subsistence wage should be by a specially constituted authority, which should also determine variations from it to meet the conditions of different districts and of different towns, or, in rare cases, special conditions of trade.

(23) That the subsistence wage so determined should be established by statute, to take effect immediately on the expiry of the Wages (temporary regulation) Act, 1918, or any prolongation of it, and to apply to the employment for gain in all occupations (other than domestic service), for which a minimum wage has not been determined by an industrial council or by a trade board or other statutory authority.

Mothers' Pensions and Employment of Children

That (24) the government should give consideration to the question of adopting a scheme of mothers' pensions for widows and for deserted wives with children, and for the wives with children of men physically or mentally disabled, such pensions to be granted only after investigation where there is need, and subject to supervision, and otherwise to be administered on the lines followed for pensions granted to the widows of men deceased in war.

(25) That the department or departments of government concerned should draw up for the consideration of the government a scheme by which the entire direct costs involved by the lying-in of women, under thoroughly satisfactory conditions, should be provided by the state.

(26) That a scale of wages should be established for girls 50 cents a week less than the women's subsistence wage for each year under 18, and that no girl should be employed for gain at lower rates than those of this scale, unless a duly constituted authority, such as a trade board or industrial council, fixes such lower rate where the employment is of the nature of an apprenticeship. Also that the question of girls and boys under 16, working on piece, should be specially considered by the department or departments of government concerned, with a view to the definite abolition of such working if it is found to be detrimental to health.

(27) That the government should continue to give the strongest possible support to proposals for the international regulation of labor conditions, which should lessen the danger of the foreign trade of this country being injured as a result of the employment of underpaid labor abroad.

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SOCIALISM OPPOSED TO DEMOCRACY

Democratic government is a government of co-operation, the working together of individuals, the result of individual impulse. Socialism is working together as the result of government and outward direction. That is the difference between Socialism and the co-operation with which men worked together in the Liberty Loans.

By Professor W. S. Myers.
(From "American Industries.")

It is rather interesting and curious to find that a great many of the people who have taken literally President Wilson's declaration that we must make the world safe for democracy are also making it their business to spill a sort of altruism over the entire world. They are so busy attempting to spread democracy that they are not always certain in their own minds, it seems, as to what you mean by democracy. In fact, many of their *confreres* are extremely active just at the present time in trying to so transform their own country that they go to prove that they have very little confidence in the brand of democracy that we usually have known as American. In other words, they are trying to change our government from a democratic government into an autocratic one, from an American government into one modelled on European paternalism. That is, they are trying, whether by fair means or foul, whether openly or secretly, whether in an acknowledged way or tacitly, to put us upon a socialistic basis. And socialism, to my mind, is not only un-American, but it is undemocratic.

Of course, in discussing such a thing as socialism, the first difficulty we have is to get a definition of socialism. I know a great many socialists, and seldom do you find them agreeing upon what socialism is. It is just about as hard as trying to define religion. But, by talking with a number of socialists, we work out a definition which they are willing to accept, and it is this—that socialism is the government ownership of manufacture and distribution of all forms of wealth; and by that they mean the manufacture and distribution, that is, the production and transportation, of all forms of wealth; not merely in the sense of money, but in the sense of anything that is for the economic good of man or his welfare and enjoyment.

If we are going upon that basis, where the State takes over the means of manufacture, distribution, transportation and such, it means inevitably that we are going to substitute a government judgment for the individual emulation and competition, and it will become the duty of the government to decide how people shall be happy and what their measure of happiness shall be. Now it seems to me that just as soon as you undertake to substitute a government judgment for the individual judgment, you are on ground that is anything except American, because if the government is to decide as to the happiness of the individual, of course it first relieves him of all responsibility. In a socialistic State there is not the same responsibility of citizenship as you find in democracy, like America.

It seems to me that after all ambition is not only right, but it is one of the most valuable attributes of the human mind. Because what is ambition? Is not ambition just like any other thing—the greater the value of it the greater is the wrong when it is wrongly used, the greater is the abuse? Is not ambition, after all, the desire for greater service? And, mark you, what is every business man trying to do in order to increase his business? He is trying to appeal to the service of the public, public service, in order that, by serving the public, he may increase his business. Ambition is not only one of the most valuable, but one of the most necessary, human attributes.

What is the object of the American government? It is to give equality of opportunity. As the Declaration of Independence said, men are born free and have equal rights to the pursuit—not to the gift of happiness, but to the pursuit—of happiness. The object of our Government is common equality of opportunity for each individual to work out his own salvation.

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So sure are we of the service Barrett Specification Roofs will give *under the most severe conditions*, that we are prepared to *guarantee them for 20 years*, in all towns of 25,000 or over, and in smaller places where our Inspection Service is available, provided they are 50 squares or more in area. The guarantee costs you nothing. We merely require that our Specification dated May 1, 1916, shall be strictly followed and that we have an opportunity to send inspectors to watch the job during construction. The guaranty is a Surety Bond issued by a well-known fidelity and guaranty company.

Copies of The Barrett Specification, with roofing diagrams, mailed free on request.

The Barrett Company LIMITED

MONTREAL TORONTO WINNIPEG VANCOUVER
ST. JOHN, N.B. HALIFAX, N.S. SYDNEY, N.S.

INDUSTRIAL CANADA

ISSUED BY

The CANADIAN MANUFACTURERS ASSOCIATION.

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Editorial Comment

Employment Management.

AN experiment is being tried by the University of Toronto in establishing a short course on Employment Management during this month. Instruction is being given daily, except on Saturdays. The course falls into three divisions, namely: Personal Management, Industrial Psychology and Economic Principles and Methods. Two of the lecturers are, Lt.-Col. John J. Coss, of Columbia University, and a member of the War Industries Board of the U.S., and Dr. E. K. Strong of the Carnegie Institute of Technology, Pittsburgh, and a member of the Committee on the Classification of Personnel in the United States Army.

If the University authorities find that the results of the present course justify the efforts which have been made, it is probable that similar courses will be instituted in the future.

Justice Masten's Report on Insurance.

THE report on the Insurance Commission by the Honorable Mr. Justice Masten, Commissioner, has just been issued in pamphlet form by the King's Printer for the Legislative Assembly of Ontario. The preliminary copy of the report was fully analyzed by the Association's Insurance Department and was made the subject of comment in the report of the Insurance Committee to the annual meeting. The Insurance Committee is giving further study to the report in order that the Association's position may be maintained before the Parliamentary Committee, which it is understood will be appointed at the coming session to consider the advisability of legislation in regard to certain features of the report.

Inspection of Risks.

THE Dominion Fire Commissioner, Ottawa, has now organized his Department which provides facilities for the inspection of premises throughout Canada. The Department will arrange to send inspectors to any factory in Canada. These experts will go over the plant and make a report as to the possibility of reducing the danger of fire. This service is given free by the Department, which hopes by this means to reduce the appalling fire waste in this country.

A questionnaire has been issued to all factory owners in Canada asking them for certain information in regard to their premises and insurance. As the Dominion Fire Commissioner is acting in conjunction with the Dominion Fire Prevention Association, on which we have several representatives, it is hoped that our members will co-operate to the extent at least of filling in this questionnaire and returning it.

National Industrial Conference.

THE National Industrial Conference which opens in Ottawa on September 15th will undoubtedly be of great importance in Canadian industry. Without going into greater detail concerning the report of the Royal Commission on Industrial Relations, on whose recommendation this Conference has been called, it may be said that the report of the Commissioners is chiefly a series of demands to give the wage earning class more than they have been getting. In other words, unless production can be stimulated all other classes will get less than they are now receiving, in order that the wage earners may get more. But one of the demands is for shorter hours which means, of course, less production. That is, there is to be less to divide than there is now. Consequently, if the wage earners are to get still more than they are receiving, and if production is to be cut down considerably, it must follow that all classes other than wage earners must accept a serious curtailment if all the demands of labor are to be granted.

It would seem reasonable to suppose that with Europe crying out for our products at the highest prices, the first thing that both employers and employees should consider would be how to increase production in order that there might be more to divide.

Specialized Technical Education.

THE plea for better educational opportunities for textile workers, voiced by Professor A. F. Barker, of Leeds University, who has been making a study of conditions in the textile industry in Canada, has an appeal for all manufacturers. Speaking at a convention of leading members of the industry held in Toronto this month, the

professor declared that manufacturers must see to it that the conditions of practice are attained by means of an efficient school equipment and by offering to prospective students opportunities for further practical experience in the mill during the long vacation.

Among the essential requirements of the industry, if it were to progress, he counted well-trained managers and pioneers, intelligent, interested and conscientious operatives, leading a happy life, well-equipped research laboratories and sheds and a conditioning house and a bureau of standardization which would make practicable scientific accuracy.

Given these, he considered that prospective managers and teachers should receive a university education supplemented by post-graduate study and practical experience. Textile classes in either towns and cities, or in the mills themselves, with travelling libraries, would assist in the accomplishment of this, as would the coupling of fundamental research, the training of researchers and standardization of the industry to Canadian conditions.

As to justification for the contemplation of such a comprehensive scheme in this country, the professor pointed out that the very basis of life had been changed during the past few years, and that much depended on the manner in which the changed outlook was to be faced.

Speaking later in the day, Hon. Dr. Cody, Minister of Education for Ontario, asserted that he believed the time had possibly come when it was necessary to have specialized technical schools, just as we now have schools for the teaching of agriculture exclusively. His request for full information, as to the requirements of the technical industry, indicated a willingness on the part of the authorities to consider the needs of the day.

Are You Keeping in Touch with Your Association?

(From "American Industries")

THE problem of how to reach the proper executive officer of manufacturing companies with important, and many times, action-requiring Association information, concerning legislative or other matters of interest, has been one of the oldest and most aggravating features of the work being done by business men's organizations.

Frequent complaint is heard from many members of business organizations that they are not kept properly informed as to the activities of their associations. This is utilized both as an apology as well as the actual reason for failure by members to co-operate with active organization officers. It is this very condition that often greatly discourages or hampers effective work which might otherwise be successfully accomplished by business men's and employers' associations.

The quantities of mail delivered daily to the executive officers of many manufacturing concerns has at times been described as "an avalanche." In some institutions big clothes baskets are used to receive it and permit its being sorted for distribution. For the most part, second class, or "printed matter" mail is sent to the advertising department, or is superficially examined by some office boy or minor officer, who consigns it mainly to the waste basket on the theory that the "boss must not be bothered with it." This condition of mail matter in manufacturing plant offices is so prevalent that it might prove interesting for many executives to investigate and see for themselves, not alone how much actual mail is received every day, but what is done with a good part of the second class, or "printed matter" portion of it.

Judgment or competency among office employees, in such things as assorting or appreciating relative values of mail matter, is about as easy for "the boss" to control as it is for the average man successfully to supersede the control his wife has over home affairs.

The suggestion is, therefore, made for the consideration of N. A. M. members and those of other business associations, that they arrange to have all bulletins, or association information and correspondence, mailed to their homes. This would enable both Association officials and the members to establish more direct and essential contact with each other. It would likewise greatly enhance the value of organization to the manufacturer as well as increase the effectiveness of such bodies.

A Great South African Exhibition.

A CALL to Canadian manufacturers to take advantage of the opportunity afforded by the Great National Exposition of South African Products and Manufactures to be held next March and April in Pretoria, to show their products in the South African market, is made by W. J. Egan, Canadian Trade Commissioner at Cape Town. Mr. Egan declares that this exhibition at Pretoria, on which half a million dollars will be spent, will give Canadian manufacturers a good chance to display their ability to supply the people of South Africa with much of their import requirements. The only restriction on exhibits of overseas British and allied manufactures is on such goods as clash with domestic products. In so far as Mr. Egan can judge, the only line of Canadian goods which would be refused display would be windmills. The committee in charge are most anxious to place space at the disposal of Canadian manufacturers and a special block of buildings will be provided to house overseas exhibits.

The secretary and general manager of the Exposition is Mr. W. J. Laite, who is well-known in Canada in connection with the South African Manufacturers' Association. The thought suggests itself that Canadian firms, which are already represented in South Africa, should immediately take up the question of making an exhibit with their representatives.

Alberta's Industrial Congress.

BECAUSE the industrial congress recently held in Alberta developed some rather significant features, a good deal of space is being devoted in this issue of INDUSTRIAL CANADA to a report of the proceedings. We are apt to regard the prairie provinces as given over entirely to the pursuit of agriculture. That they also possess possibilities, in their wealth of natural resources, of becoming manufacturing as well as agricultural centres, has been brought home by the enlightenment afforded by the recent congress.

The desire on the part of the citizens of Alberta to see manufacturing developed in their province is commendable. Already, as the visitors found when they inspected the factories of Medicine Hat, manufacturing industry has made notable progress. And one effect of any such development will be to create a more sympathetic attitude on the part of the farmer citizens of the West towards manufacturing in general. They will begin to know and appreciate the difficulties which manufacturers have to contend with and they will experience some of the advantages

which flow from the presence of industries in the community.

Speakers at the congress dwelt on this point and made a direct plea to the agriculturalists on behalf of industry. Mr. Riley, of Winnipeg, uttered a pointed truth when he said, "You've either got to establish industries and factories or you will lose your surplus population in exactly the way that Ontario did. You have built up merchandizing centres in this country; you must start manufacturing centres."

Finley P. Mount, an American manufacturer, who also spoke before the congress declared, "Your farmer must learn as ours has long since learned that industrial development is his best friend and his best paying investment. As the market at his door increases, so will the value of his products and his farm increase. As new industries are built up in your communities, new opportunities for profit and enjoyment of life are created. Your foreign market for your agricultural products is now good, and it is reasonable to suppose it will be a good market for some time to come, but eventually your reliance must be on your home market. A home market is always a better market, a higher and a surer market, and for this reason, if no other, you should see to it that industrial enterprises are built up in each of your local communities. This should be done by building the things your communities most need, and the materials for which are nearest at hand."

Lighting Essentials

IN its campaign to conserve the health and accordingly the efficiency of workers in industrial plants, the Commission of Conservation directs attention to the value of proper illumination of buildings. The lighting of buildings, it declares, must be considered from two aspects, (1) the distribution of daylight admitted through windows and (2) artificial lighting.

As regards daylight, the best method is undoubtedly through skylights, so that all parts of the rooms are lighted about evenly and the light is uniformly diffused. For this reason, many modern factories have been built of only one storey. Owing to high land values and other considerations, such buildings are not always possible. But much can still be done by proper arrangement of work-tables, etc., with relation to the windows. The shadow of the worker's body, head or hands should not be thrown upon his work. Often it may be necessary to supplement the daylight by artificial light which is kept burning all day, but this is a wasteful condition to be avoided wherever possible.

Artificial light has this advantage over daylight, that it is absolutely under our control. One should not imagine that mere brightness or quantity of light constitutes good illumination. On the contrary, a glare is unpleasant and injurious to health. For large areas of work, the light should be overhead and as uniformly diffused as possible, direct glare being avoided by the use of frosted globes. For example, such lighting would be suitable for warehouses. But for some operations, the light needs rather to be focused on the work, for example, for office work, where usually all that is necessary is a desk-light which illuminates the paper without shining directly into the eyes of the writer.

An English author gives the following five tests for good illumination:

1. It must furnish the user sufficient light so that he can see;

2. It must be so placed that it does not cause the user's eyes to change the size of the diaphragm when ordinarily using the light;

3. It must be steady;

4. There shall not be any polished surfaces in its vicinity that will reflect an unnecessary bright spot anywhere that can be seen by the eyes of the worker;

5. It must be protected so that it does not shine in the eyes of some other worker.

DECLARATION OF LABOR PRINCIPLES OF THE NATIONAL ASSOCIATION OF MANUFACTURERS OF THE UNITED STATES OF AMERICA

1. Fair dealing is the fundamental and basic principle on which relations between employers and employees should rest.
2. The National Association of Manufacturers is not opposed to organizations of labor as such, but it is unalterably opposed to boycotts, blacklists and other illegal acts of interference with the personal liberty of employer or employee.
3. No person should be refused employment or in any way discriminated against on account of membership or non-membership in any labor organization, and there should be no discriminating against or interference with any employee who is not a member of a labor organization by members of such organization.
4. With due regard to contracts, it is the right of the employee to leave his employment whenever he sees fit, and it is the right of the employer to discharge any employee when he sees fit.
5. Employers must be free to employ their work people at wages mutually satisfactory, without interference or dictation on the part of individuals or organizations not directly parties to such contracts.
6. Employers must be unmolested and unhampered in the management of their business, in determining the amount and quality of their product, and in the use of any methods or systems of pay which are just and equitable.
7. In the interest of employees and employers of the country, no limitation should be placed upon the opportunities of any person to learn any trade to which he or she may be adapted.
8. The National Association of Manufacturers disapproves absolutely of strikes and lockouts, and favors an equitable adjustment of all differences between employers and employees, by any amicable method that will preserve the rights of both parties.
9. Employees have the right to contract for their services in a collective capacity, but any contract that contains a stipulation that employment should be denied to men not parties to the contract is an invasion of the constitutional rights of the American workman, is against public policy and is in violation of the conspiracy laws. This Association declares its unalterable antagonism to the closed shop and insists that the doors of no industry be closed against American workmen because of their membership or non-membership in any labor organization.
10. The National Association of Manufactures pledges itself to oppose any and all legislation not in accord with the foregoing declaration.

News and Views of the Association

There will be found each month in this department a record of the various activities of the Canadian Manufacturers Association during the preceding month. The information is supplied to INDUSTRIAL CANADA officially, and all members of the Association are urged to acquire the habit of reading and checking over the contents of the department carefully in order to keep themselves posted on the work of the Association

Executive Council Meeting, St. John, N.B.

The President has called a meeting of the Executive Council at the Board of Trade Building, St. John, N.B., Wednesday, October 1st, 1919, 10 a.m.

The semi-annual meeting of the Maritime Division will be held in the Board of Trade Building, St. John, N.B., on the next day, October 2nd, following the meeting of the Executive Council.

Invitations have been issued to all members of the Association in the Maritime Provinces to attend the Executive Council meeting on October 1st. Arrangements have been made, after full discussion with Mr. Angus MacLean, of the Bathurst Lumber Company, Bathurst, N.B., Chairman of the Maritime Division, and Mr. W. S. Fisher, of the Enterprise Foundry Company, Sackville, N.B., 2nd Vice-President of the Association.

In connection with these meetings in St. John, arrangements have been made for certain departmental heads of the Association to make a tour of the Maritime Provinces for the purpose of meeting members and discussing with them certain problems which come within the scope of their department. Meetings will be held at specified points, and members of the Maritime Provinces will be notified when departmental heads will arrive.

The itinerary is as follows:

Sunday, Sept. 28th—Leave Toronto, C.P.R., Union Station, 10.30 p.m.
Monday, Sept. 29th—Arrive Montreal, Windsor Station, 8.00 a.m.
Hold Executive Committee meeting, 10.00 a.m.
Leave Montreal, 7.00 p.m., C.P.R., Windsor Station.
Tuesday, Sept. 30th—Arrive Fredericton, 12.05 p.m.
Meeting in Fredericton.
Leave Fredericton, 8.50 p.m.
Arrive St. John, 11.30 p.m.
Wednesday, Oct. 1st—Executive Council Meeting, Board of Trade Building, St. John, 10.00 a.m.
Thursday, Oct. 2nd—Semi-annual meeting Maritime Division, Board of Trade Building, St. John.
Leave St. John, via Canadian National Railway, 6.10 p.m.
Arrive Moncton, 9.15 p.m.
Friday, October 3rd—Meeting at Moncton.
Leave Moncton 4.30 p.m. via Canadian National Railway.
Arrive Truro, 9.00 p.m.
Saturday, Oct. 4th—Meeting in Truro.
Leave Truro via Canadian National Railway, 1.40 p.m.
Arrive Halifax, 3.40 p.m.
Sunday, October 5th—At Halifax.
Monday, October 6th—Meeting in Halifax.
Leave Halifax, 8.00 p.m. via Canadian National Railway.
Tuesday, October 7th—Arrive Sydney, 9.00 a.m.
Meeting in Sydney.
Leave Sydney, 8.30 p.m. via Canadian National Railway.
Wednesday, Oct. 8th—Arrive New Glasgow, 4.17 a.m.
Meeting in New Glasgow.
Leave New Glasgow via Canadian National Railway, 3.00 p.m.
Arrive Amherst, 8.05 p.m.
Thursday, Oct. 9th—Meeting in Amherst.
Leave Amherst, 12.23 p.m.
Arrive Charlottetown via Sackville and Cape Tormentine, 7.05 p.m.
Friday, October 10th—At Charlottetown.
Leave Charlottetown, 12.50 p.m.
Arrive Sackville, 7.50 p.m.
Leave Sackville, Canadian National Railway, 8.25 p.m.
Saturday, Oct. 11th—Arrive Montreal, 7.55 p.m.
Leave Montreal, Canadian Pacific Railway, 10.00 p.m.
Sunday, October 13th—Arrive Toronto, Canadian Pacific Railway, 8.30 a.m.

The railway fares are as follows:

Toronto to Halifax, going C.P.R. to St. John, thence Canadian National; returning Canadian National to Montreal, thence C.P.R.	$63 95
Montreal to Halifax, going C.P.R., returning Canadian National	43 05
Toronto to St. John, going and returning C.P.R.	50 85
Montreal to St. John, going and returning C.P.R.	29 90

These fares do not include the side trips to Fredericton, Sydney and Charlottetown. Fares for these trips being at follows:

Fredericton Junction to Fredericton and return	$1 50
Sackville to Charlottetown and return	5 70
Truro to Sydney and return	12 85

Members from points west of Toronto may purchase through tickets via G.T.R. to Toronto, thence C.P.R.; and members from points east of Toronto could connect with the party at Montreal.

Local arrangements for the meetings mentioned above are being made by H. R. Thompson, Secretary of the Maritime Division, Amherst, N.S.

National Industrial Conference

Mr. Melville P. White, Canadian General Electric Co., Ltd., Mr. James Merrick, Secretary, Employers' Association of Toronto, and Mr. H. Macdonald, Legal Secretary of the Association, representing our Committee on Industrial Relations, visited Washington recently to study the whole subject of industrial relations in the United States, when valuable information was obtained.

The effect of the forthcoming Conference at Ottawa, and its conclusions will have undoubtedly a very important bearing upon legislative and administrative proposals in this country.

One of the most serious problems confronting industrial management is the competition for the control of its own men by an external force. Management will, therefore, either organize the thought and action of its own men or is likely to have it organized for it. We do not mean by this that in an average establishment management will encourage or permit the organization of an outside Union. On the contrary, it will meet the tendency toward organization by establishing its own form through which it undertakes to develop common interest between men and management in the same enterprise and the same plant.

The test of the legality or morality of any given organization is its purpose and the method by which it seeks to accomplish it. This is the test which is applied to all forms of business. No form of social power should be exercised without corresponding moral and legal responsibility. Therefore, no organization of employers or employees is entitled to social or individual recognition that

refuses to accept responsibility commensurate with its activity. This is fundamental. No form of association, be it that of employers or employees, has a right to exist without willingness to live within the law and under the law.

All agencies can, at this time, perform a distinct public service for Canadian industry by in every possible way bringing to the attention of the public, through the press and otherwise, the importance of sanity and steadiness, of stepping forward in the light of experience and not yielding the future of this country and its present great opportunities to speculative experiment.

Delegates to Industrial Conference

The National Industrial Conference, called by the Government, upon the recommendation of the Royal Commission on Industrial Relations, opens in Ottawa on September 15th. The delegates are divided into three groups: first, those representing employees; second, those representing employers; and third, a group made up of invited delegates from the various other classes in the country, including officials and public men. The delegates are as follows:

Group A—Labour Delegates

Tom Moore, Esq. .....United Bro. of Carpenters and Joiners, Ottawa.
P. M. Draper .....Int. Typographical Union, Ottawa.
Robert Baxter, Esq....United Mine Workers of A., Union Street, Glace Bay, N.S.
Arthur Martel, Esq....United Bro. of Carpenters and Joiners, Montreal.
Tom Izzard, Esq.....Bricklayers, Masons and Plasterers, Toronto.
F. H. Healey, Esq.....Portable and Hoisting Engineers, Niagara Falls, Ont.
Jas. F. Marsh, Esq....United Bro. of Carpenters and Joiners, Niagara Falls, Ont.
Jos. P. Hunter, Esq...Bro. Painters and Decorators and Paperhangers, Niagara Falls, Ont.
Jas. Winning, Esq.....Bricklayers, Masons and Plasterers, Labour Temple, Winnipeg.
Fred Bush, Esq. .....United Garment Workers of America, Toronto.
S. Noldofsky, Esq.....Int. Ladies Garment Workers' Union, Toronto.
J. H. Kennedy, Esq...Amalgamated Sheet Metal Workers, Toronto.
W. G. Hunter.....Pattern Makers' Association, Toronto.
J. T. Foster, Esq.....Int. Association Machinists, Montreal.
W. G. Powlesland, Esq..Int. Bro. of Blacksmiths and Helpers, Toronto.
A. C. Hay, Esq.....Bro. Railway and Steamship Clerks, Freight Handlers, Express and Station Employees, St. Vital, Winnipeg.
A. R. Mosher, Esq.....Canadian Bro. of Railroad Employees, Ottawa.
Fred Welsh, Esq.....United Association Plumbers and Steamfitters, Labour Temple, Vancouver, B.C.
R. C. McCutcheon, Esq.Int. Bro. Boilermakers and Iron Ship Builders, Winnipeg.
J. E. Tighe, Esq.....Int. Longshoremen's Association, St. John, N.B.
T. Jackson, Esq.....United Bro. of Carpenters and Joiners, Toronto.
Jas. W. Frame, Esq....Int. Bro. of Electrical Workers, Calgary, Alta.
J. L. Bourbonniere, Esq.Amal. Association Street and Electric Railway Employees, Montreal.
James Drury, Esq.....Int. Typographical Union, Montreal.
R. A. Rigg, Esq.....Int. Bro. Bookbinders, Winnipeg.
W. R. Trotter.....Int. Typographical Union, Vancouver, B.C.
A. J. Larden, Esq.....Printing Pressmen and Assistants, Ottawa.
L. J. Rousseau, Esq...Mine, Mill and Smelting Workers, Thetford Mines, P. Que.
Jos. Gorman, Esq.....Mine, Mill and Smelter Workers, Cobalt, Ont.
E. W. A. O'Dell, Esq.Boot and Shoe Workers Union, Hamilton.
W. R. Rollo, Esq.....Broom and Whisk Makers Union, Hamilton.
Arthur O'Leary, Esq..Hotel and Restaurant Employees Int. Alliance and Bartenders Int. League, Toronto.
L. Braithwaite, Esq....Amal. Meat Cutters and Butcher Workmen of N.W., Toronto.
Jas. Lockwood, Esq...Int. Bro. of Paper Makers, Sault Ste. Marie, Ont.
Maurice LaBelle, Esq..Int. Bro. Pulp, Sulphite and Paper Mill Workers, Ottawa.
E. Dalrymple, Esq....Amal. Association Iron, Steel and Tin Workers, Sault Ste. Marie, Ont.
J. A. Gillis, Esq.....Amal. Association Iron, Steel and Tin Workers, Sydney, N.S.
W. P. Harpur, Esq....Policemen's Federal Association, No. 26, London.
Henry Bishop, Esq....Civic Employees Union, No. 30, Edmonton, Alta.
Joseph Sexton, Esq...Clerical Workers Union, Glace Bay, N.S.
E. S. Woodward, Esq...Retail Clerks Int. Bro. Assen., Victoria, B.C.
Geo. Smith, Esq.....National Bro. Operative Potters, St. John's, Que.
John A. Flett, Esq.....Federal Unions, Hamilton.
G. R. Melvin, Esq.....Federal Unions, St. John, N.B.
James Simpson, Esq...Int. Typographical Union and Industrial Banner, Labour Temple, Toronto.
Gus Francq, Esq.....Int. Typographical Union and Labour World, Montreal.
D. A. Carey, Esq.....American Federation of Musicians, Toronto.
(Miss) Doris Meakin..Int. Bro. of Electrical Workers (Telephone Operators), Labour Temple, Winnipeg.
(Miss) H. Gutteridge..United Garment Workers, Labour Temple, Vancouver, B.C.
F. Grierson, Esq.....President Civil Service Federation of Canada, Ottawa.
J. C. O'Connor, Esq...2nd Vice-President, Civil Service Federation of Canada, Ottawa.
Major M. A. MacInnes.President, Western Canada Interior Association, Saskatoon, Sask.
W. A. MacDonald, Esq.Vice-President, Dominion Letter Carriers, Association, Hamilton.
S. N. Berry, Esq.....Senior Vice-President, Order of Railway Conductors, Cedar Rapids, Iowa, U.S.A.
J. M. Mein, Esq.....Canadian Railway Board of Adjustment No. 1, Montreal.
Geo. K. Wark, Esq....Canadian Railway Board of Adjustment No. 1, Montreal.
James Murdock, Esq...Canadian Railway Board of Adjustment No. 1, Montreal.
Ash Kennedy, Esq.....Canadian Railway Board of Adjustment No. 1, Montreal.
Wm. Dorey, Esq.....Canadian Railway Board of Adjustment No. 1, Montreal.
Jas. A. Sullivan, Esq...Cigarmakers Int. Union, South Hamilton.
Wm. P. Covert, Esq...Int. Alliance Theatrical Stage Employees and Moving Picture Machine Operators, Toronto.
H. A. Foucher, Esq....United Textile Workers, care of Gus Francq, Montreal.
Mrs. Kathleen Derry...Boot and Shoe Workers Union, Toronto.
W. L. Best, Esq.....Legislative Representative, Bro. of Locomotive Firemen and Enginemen, Ottawa.
L. L. Pelletier.....Dominion Legislative Representative, Order of Railroad Conductors, Ottawa.

Group B Delegates Representing Employers

1—MANUFACTURING—GENERAL

T. P. Howard..... Phoenix Bridge and Iron Works, Ltd. ..... Montreal, Que.
S. R. Parsons..... British American Oil Co., Ltd....Toronto, Ont.
M. P. White.....Canadian General Electric Co., Ltd.Toronto, Ont.
J. E. Davies.....Alberta Foundry and Machine Co., Ltd. ..... Medicine Hat, Alta.
J. G. Gernant.....International Harvester Co. of Canada, Ltd. .....Hamilton, Ont.
J. Burns.....P. Burns & Co., Ltd. .....Calgary, Alta.
E. Parnell.....Spiers, Parnell Baking Co. .....Winnipeg, Man.
T. R. Deacon.....Manitoba Bridge and Iron Works, Ltd. ..... Winnipeg, Man.
J. B. Thompson....James Thompson & Sons, Ltd.....Vancouver, B.C.
A. B. Weeks.....Canadian North-West Steel Co., Ltd. ..... Vancouver, B.C.
J. J. Coughlan.....J. Coughlan & Sons .....Vancouver, B.C.

Food Products (other than milling and packing)

G. F. Benson. ....Canada Starch Co., Ltd.....Montreal, Que.

Woollens

Richard Thomson..Hawthorn Mills .....Carleton Place, Ont.

Garment Manufacturers

J. S. McKinnon....S. F. McKinnon & Co., Ltd. .....Toronto, Ont.

Cottons

F. G. Daniels.....Dominion Textile Co., Ltd. .....Montreal, Que.

Lumber and Timber

Angus McLean....Bathurst Lumber Co., Ltd. .....Bathurst, N.B.

Manufacturers of Lumber and Timber

John R. Shaw.....Canada Furniture Mfrs., Ltd. ...Woodstock, Ont.

Printing, Publishing and Bookbinding

W. J. Bulman.....Bulman Brothers, Ltd. .....Winnipeg, Man.

Rubber

C. H. Carlisle.....Goodyear Tire & Rubber Co. of Canada, Ltd. .....Toronto, Ont.

Chemicals and Allied Products

E. G. Henderson...The Canada Salt Co., Ltd. .....Windsor, Ont.

Clay, Glass and Stone Products

F. P. Jones.....Canada Cement Co., Ltd. .....Montreal, Que.

Tobacco and its Manufactures

W. T. Gregory....Imperial Tobacco Co. .....Leamington, Ont.

Vehicles for Land Transportation

G. M. McGregor...Ford Motor Co. of Canada, Ltd....Ford, Ont.

Oils, Paints and Varnishes.

Dr. D. Strachan...Imperial Oil Co., Ltd. .....Sarnia, Ont.

Leather and its Products.

Hon. E. J. Davis...Davis Leather Co., Ltd. .....Newmarket, Ont.

Machinery

Henry Bertram....John Bertram & Sons, Co., Ltd...Dundas, Ont.

Shipbuilding

H. B. Smith.....Collingwood Shipbuilding Co., Ltd.Collingwood, Ont.
R. W. Wolvin.....Halifax Shipyards, Limited.....Montreal.

Pulp and Paper

F. A. Sabbaton....Laurentide Co., Ltd. .....Grand Mere, Que.
T. B. Wilson.....Spanish River Pulp & Paper Co...Sault Ste. Marie, Ont.

Milling

A. E. Labelle	St. Lawrence Flour Mills Co., Ltd.	Montreal, Que.
N. C. Sinclair	Empire Flour Mills, Ltd.	St. Thomas, Ont.

Packing

J. S. McLean	Harris Abattoir Co., Ltd.	Toronto, Ont.
O. W. Waller	Swift Canadian Co., Ltd.	Toronto, Ont.

Steel and Iron

F. H. Whitton	The Steel Co. of Canada, Ltd.	Hamilton, Ont.
Mark Workman	Dominion Steel Corporation	Sydney, N.S.

Supplementary delegates who may be used as substitutes to replace any of the above:

H. I. Thomas	Care of J. R. Booth	Ottawa, Ont.
W. J. Sadler	Sadler & Haworth	Montreal, Que.
T. A. Russell	Russell Motor Car Co., Ltd.	Toronto, Ont.
M. V. Ladd	Dominion Bridge Co., Ltd.	Montreal, Que.
W. S. Fisher	Emerson & Fisher	St. John, N.B.
L. W. Sims	T. S. Sims & Co., Ltd.	St. John, N.B.
Thos. Findley	Massey-Harris Co., Ltd.	Toronto.
S. Harris	Harris Lithographing Co.	Toronto.
A. Sommer	A. Sommer Co., Ltd.	Montreal, Que.
Alex. Welsh	British American Ship Co.	Welland, Ont.
James Whalen	Port Arthur Shipyards	Port Arthur, Ont.
W. A. Lawson	Bemis Bros. Bag Co.	Winnipeg, Man.
W. A. McKay	The Codville Co., Ltd.	Winnipeg, Man.
Wm. Martin	Manitoba Gypsum Co., Ltd.	Winnipeg, Man.
D. Kyle	Algoma Steel Corporation	Sault Ste. Marie, Ont.
Victor Ross	Imperial Oil, Ltd.	Toronto.
A. A. Bittues	Gillette Safety Razor Co. of Canada, Ltd.	Montreal, Que.
J. L. Waldie	Canadian Tube and Iron Co., Ltd.	Montreal, Que.
Julien C. Smith	Canada Carbide Co., Ltd.	Montreal, Que.
Wm. Rutherford	Wm. Rutherford & Sons, Ltd.	Montreal, Que.
W. S. Fallis	Sherwin Williams Co. of Canada, Ltd.	Montreal, Que.
Geo. Henderson	Brandram-Henderson, Ltd.	Montreal, Que.
P. L. Miller	Canadian Vickers, Ltd.	Montreal, Que.
B. W. Coghlin	B. J. Coghlin & Co.	Montreal, Que.

3—EMPLOYERS AND OTHER MANUFACTURERS

Canadian Mining Institute

D. H. McDougall	Nova Scotia Steel & Coal Co., Ltd.	New Glasgow, N.S.
B. Neilly	Penn-Canadian Mines, Ltd.	Cobalt, Ont.
Geo. R. Smith	Bell Asbestos Mines	Thetford, Que.
O. E. Whiteside	International Coal and Coke Co.	Coleman, Alta.

Union of Canadian Municipalities

Alderman C. H. Grant	Edmonton, Alta.
Arthur Roberts, K.B.	Bridgewater, N.S.
Mayor T. D. Bouchard	St. Hyacinthe, Que.

Canadian Electrical Association

A. Monro Grier, K.C.	Canadian Electrical Association, 12 Adelaide St. E.	Toronto.

Bell Telephone Company

J. E. Macpherson	Bell Telephone Co.	Ottawa, Ont.

Credit Men's Association

Geo. B. Fraser	Greenshields, Limited	Montreal, Que.
Hugh Blain	Eby-Blain Co., Ltd.	Toronto.
J. H. Ashdowne	J. H. Ashdowne Hardware Co., Ltd.	Winnipeg, Man.

Shipping Federation of Canada

Thos. Robb	Shipping Federation of Canada	Montreal, Que.

Pacific Coast Shipping Interests

G. M. Bosworth	Chairman, Pacific Coast Shipping Interests	Montreal, Que.

Association of Canadian Building and Construction Industries

E. R. Reid	Engineers and Contractors, Ltd.	St. John, N.B.
Col. J. A. Little	Thunder Bay Harbour Improvement Co.	Port Arthur, Ont.
H. T. Hazelton	Winnipeg Builders' Exchange	Winnipeg, Man.
Fred Armstrong	F. Armstrong, Co.	Toronto.
J. P. Anglin	Anglin Ltd.	Montreal, Que.

Canadian Railway Board of Adjustment

A. D. MacTier	Montreal, Que.
G. C. Jones	Montreal, Que.
F. P. Brady	Montreal, Que.
S. J. Hungerford	Montreal, Que.
Geo. Hodge	Montreal, Que.
A. J. Hills	Montreal, Que.

Canadian Electric Railway Association

G. Gordon Gale	Hull Electric Co.	Hull, Que.

Canadian Fisheries Association

A. H. Brittain	Maritime Fish Corporation	Montreal, Que.
H. A. Hager	Canadian Fishing Co.	Vancouver, B.C.

Group C—Delegates Representing Other Interests

Chief Justice Mathers	Court of King's Bench,	Winnipeg, Man.
Carl Riordon, Esq.	President, Riordon Pulp and Paper Co.,	Montreal, Que.
Charles R. Harrison, Esq., M.P.	Railroad Conductor,	North Bay, Ont.
J. W. Bruce, Esq.		Toronto, Ontario.
Hon. W. L. Mackenzie King		Roxborough Apartments, Ottawa.
Hon. Smeaton White		The Gazette, Montreal, Que.
F. A. Acland, Esq.		Deputy Minister of Labour, Ottawa, Ont.
Calvin Lawrence, Esq.		Kenilworth Apartments, Elgin Street, Ottawa.
Wills MacLachlan, Esq.		301 Excelsior Life Building, Toronto.
H. J. Daly, Esq.		72 Warren Road, Toronto, Ont.
G. Frank Beer, Esq.		54 Glen Road, Toronto, Ont.
Col. David Carnegie		Offices of the War Cabinet, No. 2 Whitehall Gardens, London, S.W. 1, England.
W. D. Tate, Esq.		Care of Repatriation and Employment Committee, Plaza Building, Ottawa.
Col. Thos. Candley		Nova Scotia Steel and Iron Co., New Glasgow, N.S.
J. A. Stevenson, Esq.		Care of Repatriation and Employment Committee, Plaza Building, Ottawa.
F. Pauze, Esq.		Lumberman, Montreal, Que.
R. B. Maxwell, Esq.		Vice-President G.W.V.A. of Canada, Plaza Building, Ottawa.
John Lowe, Esq.		Manager, Montreal Cotton Mills, Valleyfield, P. Que.
H. Mortimer-Lamb, Esq.		Secretary, Canadian Mining Institute, 503 Drummond Street, Montreal, Que.
R. R. Grant, Esq.		302 Avenue Road, Toronto, Ont.
Alfred Burton, Esq.		Hon. Secretary, Society of Chemical Industry, 114 Bedford Road, Toronto, Ont.
Charles A. Magrath, Esq.		Chairman, International Joint Commission, Ottawa.
F. E. Ewart, Esq.		American Institute of Electrical Engineers, 212 King Street West, Toronto, Ont.
Sir John Willison		President, Canadian Reconstruction Association, Royal Bank Building, Toronto, Ont.
Alderman C. H. Grant.		Edmonton, Alberta.
Arthur Roberts, K.C.		Bridgewater, N.S.
Mayor T. D. Bouchard.		St. Hyacinthe, Que.

Agricultural Representatives

J. A. Ruddick	Dairy and Cold Storage Commissioner	Ottawa, Ont.
H. F. Arkell	Live Stock Commissioner	Ottawa, Ont.
Geo. H. Clark	Seed Commissioner	Ottawa, Ont.
W. S. Blair	Fruit Expert	Kentville, N.S.
W. A. Brown	Live Stock Branch, Department of Agriculture	Ottawa, Ont.

Company Licensing Laws

His Majesty's Privy Council has granted leave to appeal in the three test cases which were instituted by the Association for the purpose of testing the validity of the company licensing laws of the provinces of Saskatchewan, Manitoba and Ontario. The three cases have been ordered to be consolidated in one appeal, the effect of which will be to make the cases practically a reference on the whole subject of company licensing, so that it is likely that a broad judgment will be obtained determining the questions arising not only on the particular acts in question but also the acts of the other provinces. In view of the proposed appeal it is not likely that any serious attempt will be made in any of the provinces to enforce the licensing acts as against Dominion companies.

Fire Prevention Campaign

The attention of members is directed to the "Fire Prevention and Clean-up Campaign," which is being launched throughout the North American continent during the week of October 9. In Ontario, the task of promoting the campaign is being undertaken by the Ontario Fire Prevention League, of which George F. Lewis, Deputy Fire Marshal, is Secretary. The League is doing all in its power to impress on the public the importance of co-operating in the movement to restrict the appalling fire loss which is daily consuming $42,000 worth of property in Ontario alone. To manufacturers in particular the appeal is being made that they should provide better and more systematic inspection and watchman service and more efficient fire-fighting equipment. While only 5 per cent. of the total number of fires in 1918 occurred in industrial plants, these occasioned 48 per cent. of the total fire waste of the province. To assist in making the campaign a success will be most meritorious work on the part of all manufacturers.

Recent Activities of the Prairie Division

By G. E. CARPENTER
Secretary, Prairie Provinces Division, C.M.A.

A WELL-ATTENDED meeting of members of the various branches of the Division in Alberta was held at Calgary on August 13th, when members had the pleasure of a conference with the General Manager of the Association, Mr. J. E. Walsh, upon many matters of importance to the general membership of the Association, and particularly those doing business in Alberta. At this meeting it was decided to continue the practice of holding general meetings of all members in Alberta and that the next meeting should be held in Edmonton at the time of the next session of the Legislature, when steps will be taken to perfect the organization in Alberta.

The members of the Medicine Hat and Winnipeg Branches also availed themselves of the visit of the General Manager to hold general meetings when he outlined the re-organization that had taken place in the Association, with a view of affording better service to the membership.

Labor Situation Improves

The past month has seen considerable improvement in the general labor situation in Winnipeg and in fact, Western Canada generally. Apparently the saner element in labor ranks did not take the interest that it might have done in its organization's affairs in the past, but like others was prepared to "Let George do it," with the result that the more radical element gained control. Now that the saner element sees the result of its indifference, there is every indication from reports from the Prairie Provinces that the larger body of labor is asserting itself and that conditions are improving steadily. Probably the most notable example of this happened at Drumheller where the O.B.U. officials were persuaded to take a permanent holiday. It remains now for Civic, Provincial and Dominion Governments to look ahead and place orders for next year's operations early so that as much work as possible may be done this winter and employment provided for large numbers of men. Otherwise we may be faced with a serious situation.

Saskatchewan Minimum Wage Board Award

The following decisions of the Saskatchewan Minimum Wage Board were recently announced in Regina:

First six months—Factories, $9.50; stores, shops, $9.50; made-to-order houses, $8.00.

Second six months—Factories, $11.00; stores, shops, $11.00; made-to-order houses, $10.00.

Third six months—Factories, $12.50; stores, shops, $13.00; made-to-order houses, $12.00.

After eighteen months—Factories, $14.00; stores, shops, $15.00; made-to-order houses, $14.00.

Length of week—Factories, 50 hours; stores, shops and made-to-order houses, 48 hours.

In connection with retail stores, the latest decision of the Board amends the finding of a week earlier by lengthening the period of apprenticeship from twelve to eighteen months.

Winnipeg Cartage Service

At a meeting of the Shippers' Bureau of the Winnipeg Board of Trade on August 18th, in order to assist improving the railway companies' service with a view to lessening the congestion of the freight at Winnipeg as the result of the general strike, an arrangement was agreed to with the representatives of the cartage companies under which shippers would pay an additional charge where teams were delayed by them over the prescribed limit. In a like manner shippers are to be credited with delays upon the part of the cartage companies. In order to deal with disputes arising under this arrangement a Board was appointed to be constituted of representatives of the cartage companies, the Manager of the Transportation Division of the Board of Trade and the Secretary of the Prairie Division of the C. M. A. The arrangement will become operative as soon as the cartage companies can get the necessary forms printed. In the meantime the cartage companies advise that there has been a marked improvement in the loading and unloading of teams.

Telegraph Rates Under Consideration

Telegraph companies operating in Canada have applied to the Board of Railway Commissioners for authority to increase the tolls now charged for telegraph service, which were authorized by the Board of Railway Commissioners in March, 1906, and which brought about a substantial reduction in the tolls previously in effect. In support of this application the telegraph companies state that the increased cost of labor and material, amounting to 85 per cent. and 60 per cent., respectively, has so added to the expense of maintenance and operation that the revenue derived from the present tolls is inadequate and that, if the furnishing of the telegraph service is to be continued unimpaired, there must be a substantial increase in tolls. This matter is receiving the attention of the Transportation Committee of the Division and members are invited to communicate their views to the Secretary in order that the Committee may have the benefit of the advice of the members.

Winnipeg Housing Scheme

After much talk and a great deal of delay, the Winnipeg City Council has decided to avail itself of the Government's offer and has made application for an allotment of one million dollars to be loaned to citizens for the erection of dwellings. It is planned to loan 85 per cent. of the value of the dwelling, not to exceed four thousand dollars, at 6 per cent. interest, repayable in instalments extending over twenty years. This plan is conditional upon the citizens of Winnipeg subscribing a fund amounting to 10 per cent. of the money loaned by the City, thus reducing the City's direct liability to 75 per cent. of the value of the home. It is believed that this is the first municipality in Canada that has made the adoption of the Housing Scheme conditional upon some of the citizens subscribing a fund and bearing a portion of the risk for the monies advanced by the City. However, as there is a great need for homes and as much unnecessary delay has already taken place, it is held that the attitude taken by the City Council should not result in the plan being further held up and that the 10 per cent. fund will be subscribed readily. In this connection it is felt that the manufacturers will no doubt be glad to do their share and members in Winnipeg are requested to give the matter favorable consideration and communicate with Mr. E. Parnell, of the Speirs Parnell Company.

Demurrage During Strike

Railway companies in Winnipeg reduced demurrage charges accruing on cars placed on sidings where delay occurred in loading and unloading during the strike, from the regular

scale of charges ranging from one to five dollars per day to one dollar per day flat. However, members felt that in view of the fact that the delay was caused by circumstances over which they had no control and in view of the widespread nature of the Winnipeg strike that the railways should be willing to extend to shippers the same terms that the railways are granted under the conditions of carriage embodied in the bill of lading, approved by the Railway Commission, which relieves the railway company from responsibility for delay accruing as a result of strikes. On taking the matter up with the Transportation Department of the Association, members have been advised not to pay demurrage charges accruing during the strike under the above conditions.

A committee from the Winnipeg Board of Trade and this Division has taken the matter up with the Car Service Department of the railways and the Western Committee of the Canada Railway War Board, contending that demurrage charges assessed during the strike should be treated in the same manner as those assessed during the influenza epidemic, where under an Order of the Railway Commission the railways were instructed to afford relief to shippers where delay occurred through the "Flu" and every reasonable effort had been made to load or unload the cars in question. It is hoped that the matter will be disposed of along these lines, but failing this it may be necessary to appeal to the Board of Railway Commissioners.

Made in Canada Movement Gains Strength

By SIR JOHN WILLISON
President, Canadian Reconstruction Association

PUBLIC concern for the development of the home market increases daily, and there is healthy, popular support of the Made in Canada movement. Neaarly 4,000,000 of the specially designed Made in Canada cards, issued by the Canadian Reconstruction Association are now in circulation. By the end of this month the total initial issue of 5,000,000 should be exhausted. The campaign continues to meet with warm approval from commercial and industrial interests. Manufacturers, wholesalers, and retailers are all supporting the movement, and there is no question that the cards are being given wide circulation to householders throughout the Dominion. Nearly half a million cards in French are now being circulated in Quebec. A recent report from the Secretary of our Western Committee, which has just asked for an additional half million cards, shows that in the western provinces manufacturers alone have already taken 632,000 cards, distributed as follows:—

Manitoba	95 firms	.....	283,250 cards
Saskatchewan	22 "	.....	32,500 "
Alberta	73 "	.....	140,900 "
British Columbia ...	105 "	.....	175,100 "

The Association has received scores of letters endorsing its Made in Canada activities. One firm manufacturing corks, corkwood, etc., says: "It will give us great pleasure indeed to insert these cards in our letters, invoices, pay-envelopes, etc., as we are in hearty accord with any movement that will assist in increasing the purchase of Made in Canada goods, thus building up our own country and assuring continued steady employment of our fellow-citizens in Canada."

A manufacturer of heating and cooking stoves and ranges, says: "It is no doubt a splendid way of bringing before the public the necessity of purchasing goods made at home, and we believe that it will prove very effective."

Another firm writes: "We believe that it will benefit the country and incidentally ourselves to give these appeals a widespread publication."

A milling company, asking for 2,000 cards, promises to do its best to help along the good cause. A printing company says: "We congratulate you on the campaign and hope it will be successful. You can command us at any time to help along with this work."

A firm of mining, metallurgical and industrial chemists says: "We strongly advocate Made in Canada propaganda and will do all we can to further the interests of the home markets." A French-Canadian firm says: "We are at your disposition as helpers in the movement which we appreciate highly."

Support of the movement is not confined to industrial interests. The Canadian Club of Hamilton, for instance, has asked for 5,000 cards and believes they can be used to advantage by its secretary in sending out notices, etc. Indeed the campaign should receive the support of agricultural, financial, commercial, and transportation interests as well as of industrial companies. Throughout the world other countries are pursuing a similar policy of home market development. Great Britain is protecting home industries, so are Australia and South Africa. Japan is following an extreme policy of protection. France has recently decreed increases in protective duties ranging as high as 200 per cent. Italy is following a comprehensive policy of import restrictions. Spain is to revise her tariff next month and it is expected that she will take extensive measures to protect the home market. In the United States no less than 22 bills have been introduced in the House this session calling for higher duties. Canada cannot afford to ignore the international economic movement, particularly when Canadian money is at a discount of 3½ per cent. in New York, and as high as 6 and 10 per cent. in many stores on the border. The balance of trade with the United States is against the Dominion to the extent of over $20,000,000 a month. Imports can only be reduced and the balance of trade corrected by supporting the home market and buying Made in Canada goods. Until that is done Canadian money will remain at a discount.

Capt. Robert Dollar, head of the Dollar Steamship Company, addressing the Industrial Congress at Calgary, said: "My ships are continually plying in and out of Vancouver, but only one-tenth of what they bring in stays in Canada. The balance goes to Seattle and Chicago and Detroit, and later finds its way back across the line to Canada, in tne form of manufactured goods. Wake up, you Canadians! You should be ready to take that raw material and turn it into the finished product for your own use, instead of paying all those profits to your competitors across the line."

Canada should wake up indeed. We need not only a public policy of buying in the home market, but Canadian raw and semi-manufactured materials should be used in primary and secondary processes of manufacture. With domestic production of all-Canadian goods, industrial activity would be stimulated, a large new market would be opened for Canadian labor and hundreds of millions of dollars now lost to the Dominion through the export of unfinished products would be saved to the country.

Alberta Proclaims Wealth of its Resources

Unique Gathering for the Purpose of Making Known to Eastern Canadians and Americans the Extent of the Province's Natural Resources, and Urging their Development is Staged by Alberta Industrial Development Association

By G. E. CARPENTER

Secretary, Prairie Division, C.M.A.

Special Representative of "Industrial Canada" at the Congress

FROM the standpoint of making known to a large number of men representing important industrial and financial interests in Eastern Canada and the United States, the immense and varied natural resources of Alberta, and in fact of all three prairie provinces, the Industrial Congress, promoted by the Alberta Industrial Development Association, and held during the week of August 11th in the cities of Medicine Hat, Lethbridge, Calgary and Edmonton, must be recognized as a distinct success. No effort was spared to inform the delegates from the east and south of the great potentialities of the province, and by personal contact, whenever possible, to place them in touch with those sources of wealth now awaiting development. The affair was unique of its kind. It will undoubtedly be repeated and may indeed become an annual event, with an ever widening sphere of influence.

Considerable disappointment was expressed by the Executive Committee of the Development Association and by several of the speakers, over the relatively small attendance of Canadians from Winnipeg and the East. It was unfortunately true that there were more people present from the United States than from Canada, outside Alberta itself. Possibly when the complete proceedings are printed and circulated and a better idea is obtained of the aims and objects of the Industrial Development Association, a larger number of Canadians will find it desirable to attend another year.

Favorable Publicity for Association

One of the pleasing features of the Congress was the favorable publicity which was given to the Canadian Manufacturers' Association through the presence and speeches of Mr. J. E. Walsh, the general manager, as well as through the remarks of Hon. Gideon Robertson, Minister of Labor, who gave the members of the Association a certificate of character for fair-dealing with their workmen.

When delegates from the east and south rolled down Dunmore hill into what seemed intended by nature to be a sleepy hollow, they were amazed at the extent of the industries created by the enterprising citizens of the "Gas City" of Medicine Hat.

The power question is solved for manufacturers at the Hat by nature, which provides natural gas in unlimited quantities. It is sold to plants by the city at a rate of 5 cents per 1,000 cubic feet. Fifteen thousand cubic feet of this fuel is equal to one ton of steam coal. In other words, as one local manufacturer tersely put it, "If we were supplied with steam coal for nothing, the cost of handling it and the resultant ash would be greater, and it would be far more inconvenient."

On the afternoon of Monday, the first day of the provincial tour, Mayor Brown, of the Hat, took the delegates in charge, and fifty citizens placed their automobiles at the disposal of the visitors for the purpose of showing them the industries of the city.

The first plant visited was that of the Medalta Stoneware Co., of which Charles Pratt, the chairman of the Medicine Hat Branch of the Canadian Manufacturers' Association, is president. The Medalta Stoneware Company use twelve tons of clay daily, which they bring 200 miles from a point in southern Saskatchewan for the purpose of making crocks, jugs, churns, bowls, etc. This company has captured the western Canadian market, which was formerly supplied by the United States, and is now shipping into Ontario. The company also produces flower pots from local clay.

Production of Linseed Oil

The next plant visited was that of the Alberta Linseed Oil Mills, where 1,000 bushels of flax seed is used daily in making 50,000 gallons of linseed oil a month. The by-products, linseed oil meal and cake, find a ready market in the northern part of the prairie provinces, which are going more and more into mixed farming. Mr. W. A. Church, the honorary secretary of the Medicine Hat Branch, is manager of this company.

The Alberta Foundry & Machine Co., J. E. Davies president, which did its "bit" in turning out munitions during the war period, has entirely remodelled its plant for the manufacture of a farm tractor which they have named the "Canadian." The courage of the West is exemplified by this company's enterprise, notwithstanding the continual cry of the prairie farmers for "free tractors." The company intends to place 1,000 of these tractors on the market for next year's use.

Another company in Medicine Hat has also turned its attention and energies to tractor manufacture, viz., Martin & Phillips, who are making the "Stinson."

While the cessation of municipal work and building of all kinds during the war must have had a great effect in curtailing their market, the Alberta Clay Products Company, which make brick, hollow tile and vitrified sewer pipe, have continued their operations right along, and have now a large stock on hand to meet future requirements.

The Medicine Hat Brass & Pump Company have a large, busy factory for the manufacture of iron pumps and farm windmills to be used in connection therewith.

The Tabor Candy Company's plant was visited also, and there, the ladies in the party especially, were treated to a fine, fresh sample of the "Taberta" brand of candies and shown the sanitary conditions under which they are produced.

A Great Flour Milling Centre

Medicine Hat is the largest flour milling centre in Alberta, and no tour of its industries would be complete without a visit to the modern plants of the Ogilvie Flour Mills Co., the Lake of the Woods Company, and the Maple Leaf Milling Company. These mills have a combined capacity of between 4,000 and 5,000 barrels a day.

Owing to lack of time, the delegates did not have an opportunity of visiting the many other factories in the Hat, but were driven over to the neighboring city of Redcliff and spent an enjoyable hour looking over its industries, the principal of which were the large rolling mills of the Cana-



Leaders in the Fields of Industry and Finance who

dian Western Steel Company, where an open hearth furnace has recently been added to the equipment.

At the Dominion Glass Company's plant visitors were entertained with a demonstration of an almost human machine which reaches into a furnace of molten glass, picks up a lump and casts and blows it into a finished bottle.

The coal mine of the Redcliff Brick & Coal Co. attracted a lot of attention from the visitors, who realized that this district is doubly blessed in its two principal natural resources, gas and coal.

In the evening the Medicine Hat Board of Trade entertained the visiting delegates at a banquet, which was served by the young ladies of the city, in the curling rink. Acting-Mayor Huckvale presided, and extended an official welcome to the visitors.

The first speaker, Col. Nelson Spencer, M.L.A., dealt with Alberta's future development, stating that in 14 years the value of its manufactured products had increased from $65,000 to $400,000 per annum. He dwelt upon the fact that Alberta contained one-fourth of the arable lands of Canada, and one-seventh of the known coal resources of the world.

Speakers Express Appreciation

James Ramsay, M.L.A., Edmonton, followed along similar lines, and the appreciation of the American visitors was expressed by R. C. Haskins, Vice-President of the International Harvester Co. of America, Chicago; Mr. Hill, manager of the Business Men's Bureau of the Chicago Chamber of Commerce; and Mr. Thorn, representing Montgomery Ward Co., Chicago.

D. W. Hays, President of the Canada Land & Irrigation Co., spoke upon the extent of irrigated lands in southern Alberta, which, he stated, comprised 1,000,000 acres.

D. C. Coleman, Vice-President, Canadian Pacific Railway, referred to that company's large investment in southern Alberta, and expressed confidence in its future.

J. E. Walsh, General Manager, Canadian Manufacturers' Association, referred to the growth of manufacturing enterprises in Western Canada, as evidenced by the fact that three years ago the membership in the Association in the prairie provinces was less than 200, whereas to-day it stands at over 550. He also quoted figures showing the large increase in capital invested in factories in the Prairie Provinces, the number of workpeople employed, the varied articles made and the value of the products.

E. Leonard, of E. Leonard & Sons, advocated the taking of the tariff question out of the hands of designing politicians and placing the matter of tariff regulations and customs duties under a Board representing all classes of citizens for careful study and scientific adjustment. His remarks met with considerable applause, and were ably seconded by M. J. Beatty, of Beatty Bros., Fergus, Ont.

Father Fitzpatrick and Wm. Toole, Calgary, also spoke.

Trip to Lethbridge

Following the banquet, the city of Medicine Hat "blew off" a gas well. Delegates who had not witnessed an event of this character were greatly impressed with the awful forces of nature.

Tuesday morning the visitors, with a number of Medicine Hat citizens, departed by special train for Lethbridge, where they were entertained at luncheon by the Board of Trade of that city. Those who had not visited Lethbridge for a few years were deeply impressed with the manner in which the city had been beautified since their last visit, the Galt Park, comprising 10 acres, adjoining the station, around which the business section is built, being specially remarked upon.

The chief industries of the city are, the plants of the Columbia Macaroni Co., the Taylor Milling Co., The Lethbridge Brewing Co., and the many coal mines, whose payroll under normal conditions is $160,000 per month.

Following the luncheon, the party was motored through the country surrounding the city, particularly to view the irrigation farms. It was claimed the productiveness of these lands was increased three-fold by irrigation, three crops of alfalfa



attended the Alberta Industrial Congress last month —*Photo by W. J. Oliver, Calgary.*

being harvested each year, also that their value was increased from $25 to $160 per acre.

The special train arrived at Calgary at 9 p.m., and Wednesday morning about 600 delegates assembled at the Grand Theatre for the business sessions of the Congress.

Congress Opened at Calgary

Promptly at 10 a.m. Mayor Brown, of Medicine Hat, and President of the Alberta Industrial Development Association, opened the business sessions of the Congress. With him on the platform were: Lt.-Gov. His Honor R. G. Brett; Premier Hon. Chas. Stewart; Acting-Mayor McCoubrey, Calgary; Wm. Toole, President, Calgary Board of Trade; J. E. Walsh, General Manager, Canadian Manufacturers' Association, Toronto; D. C. Coleman, Vice-President, Canadian Pacific Railway, Winnipeg; R. Warren, Asst. Gen. Manager, Canadian National Railways, Winnipeg; Col. J. S. Dennis, Chief Commissioner, C.P.R. Dept. of Colonization and Development, Calgary; and several others.

After the invocation and reading of messages of regret, M. A. Brown, Mayor of Medicine Hat and President of the Alberta Industrial Development Association, explained the purposes for which the congress had been called. The subject uppermost in everyone's mind at the present time, he said, was how the country is to pay its great obligations contracted during the war. This could only be done by intensive development, and it was plain to be seen that development was not intensive in this country. Everybody knew, he said, that the greater portion of the resources of this country were still undeveloped. There had been an increase in development during the last 15 years, he said, but the increases had not been big enough.

Some, he said, held the opinion that the country is not ready for an intensive development at the present time, but he did not agree with this view. "The time has arrived," he said, "when we should be more than producers of raw materials. We should produce the finished article for the world's markets. To convince the world of these facts we called this industrial congress. I think that the delegates will be satisfied of this when they have seen the country and heard the speakers at the meetings here. The interest of the United States in this congress speaks much for the friendship between the two countries."

Addresses of welcome were also delivered by Lieut.-Governor Brett, Premier Stewart, Acting Mayor McCoubrey, and Wm. Toole, President of the Calgary Board of Trade. The congress then got down to business, and throughout the sessions of Wednesday and Thursday listened to informative addresses, by men of prominence in the fields of science and industry, on the resources of Western Canada, and the policies which should be adopted for their development. A motor trip through the city and visits to the theatres and golf and country clubs were interspersed in the proceedings, while on Thursday evening the Board of Trade banqueted the delegates at the Hotel Palliser.

Visit to Edmonton

During Thursday night a special train conveyed the members of the congress to Edmonton. At noon on Friday a luncheon was tendered by the local board of trade, after which a final session of the congress was held. Then in the evening the Provincial Government entertained the visitors at dinner, while the day's proceedings terminated with a reception at Government House. Entertainment features filled in the hours of Saturday, the final day of the convention.

In the following pages a few of the addresses delivered before the Congress are published, while it is hoped in subsequent issues to present readers of INDUSTRIAL CANADA with others of the more important addresses at the gathering. Altogether a great deal of material was collected bearing on the resources of the Province of Alberta which is well worth preservation.

The Natural Resources of Western Canada*

Western Provinces Have Been Blessed with Immense Resources in Agricultural Land, Coal, Gas, Oil, Clay, Timber and Precious Minerals, and Sooner or Later these will all be Developed along Proper Lines

By COL. J. S. DENNIS, C.M.G.

Chief Commissioner, Department of Colonization and Development, C.P.R.

I PROPOSE to deal with our natural resources under separate headings and in the order of their importance as I view the subject, beginning with that natural resource which is the foundation of development and progress in all countries, viz., Agricultural Land.

The measure of sound prosperity in any country is the possibility of producing, through agriculture, the food needed by its inhabitants. It is recognized that many countries which have not been favored with large agricultural areas have reached a measure of prosperity through industrial development of their other natural resources, but the necessity for local production of sufficient food for home consumption through the utilization of available agricultural land has been specially emphasized in many countries during the late world war.

In the matter of land available and suitable for successful agriculture with all its allied interests of horticulture and animal industry, nature has been very bountiful to the four western provinces of Canada. The Provinces of Manitoba, Saskatchewan, Alberta and British Columbia comprise an area of about 711,000,000 acres. Of this vast area it is estimated that at least 225,000,000 acres are available for immediate settlement and cultivation. At the present time not more than 30,000,000 acres of this area are occupied and cultivated, leaving the enormous area of 195,000,000 acres of good land available for further extension of our agricultural activities. The total population of these four western provinces does not exceed 2,200,000, and when it is realized that this small population occupies this vast area in such a manner as to provide an average of only 1.88 people per square mile one can get some conception of the possible density of population and the enormous value of agricultural products which will be produced so soon as the remaining 195,000,000 acres are occupied and made productive. For comparison, it may be noted that were the Western Provinces occupied on the same basis of distribution of population per square mile as the small Province of Prince Edward Island in the eastern portion of the Dominion, the four western provinces of Canada would to-day have a population of 20,000,000.

Difficulty of Securing Settlers

Our greatest problem in Western Canada to-day in connection with the development of our natural resources is that of securing settlers of the right kind to take up and cultivate the vast unoccupied acreage, which only awaits the intelligent effort of the agriculturist to produce vast quantities of food.

The suitability of the vast unoccupied areas of the four western provinces of Canada for successful agriculture, horticulture and animal industry has now been definitely proved by the prizes won in competition with all the other countries of the world, for our grain, fruit and livestock, and the grain production in the occupied areas of our prairie provinces, even under the existing conditions of sparse settlement, is already playing, as is indicated by the figures I will quote, an important part in supplying the food of the world.

It is within my recollection, and also that of other "old timers" present, that the vast areas in these western provinces now occupied by thousands of prosperous farmers were looked upon and characterized as a part of the "Great American Desert" unsuited for occupation or the growth of grain, and destined to be the home of wandering bands of hardy cattle as successors to the buffalo. This erroneous idea was only dispelled by the efforts of those hardy pioneers at widely scattered points, who undertook to cultivate the soil, and it has now been entirely removed by the actual results obtained in the production of grain, vegetables, fruit and livestock all over these provinces.

The value of the agricultural, dairy and animal industry products of these four western provinces for the year 1917, the last year for which complete statistics are available, amounted to the sum of $1,222,831,000, made up as follows:

Manitoba		
	Grains and fodder	$137,470,750
	Dairy produce	8,054,567
	Live stock	88,350,000
	Total	$233,875,317
Saskatchewan		
	Grains and fodder	$349,488,200
	Dairy produce	4,098,187
	Live stock	218,125,000
	Total	$571,711,387
Alberta		
	Grains and fodder	$176,965,800
	Dairy produce	10,218,876
	Live stock	216,148,000
	Total	$403,332,576
British Columbia		
	Grains and fodder	$ 12,171,100
	Dairy produce	1,355,837
	Live stock	375,357
	Total	$ 13,912,294

It is true that on our vast agricultural areas nature exacts intelligent effort in utilizing the facilities she has provided, and at times like the present year, withholds in certain districts the moisture necessary for successful agriculture.

The introduction of irrigation in the southern portion of the Province of Alberta and the western portion of the Province of Saskatchewan, and the proper utilization of the water supply provided by our rivers, has provided that vast areas of land in those districts which at times are lacking sufficient rainfall for successful agriculture, can be made, and are being proved, the most productive and intensively cultivated areas in the West. In this great work the Canadian Pacific Railway Company have already expended over $15,000,000 in providing canals and ditches for the proper distribution of water, but

*Address before the Alberta Industrial Congress, Calgary, August 13, 1919.

the extension of this most ancient of all systems of permanent agriculture to the vast areas which can be reclaimed is a work of national importance and one which in the near future must engage the attention of both our Dominion and Provincial Governments.

Outside of the utilization of our agricultural areas for the production of grain, fruit and livestock as food products, Western Canada offers exceptional opportunities for wide extension of our milling, packing, canning and tanning plants, and of industries for the utilization of our vast quantities of cereal straws for the manufacture of paper, it having already been demonstrated that the straw of the flax grown in these Western Provinces produces a very high grade of paper.

Situated as the four western provinces are in the northern part of the Northern American Continent and subjected to cold winter weather on account of their geographical position, the question of fuel for domestic use is, of course, a matter of first importance. In this connection nature has again been very bountiful, and aside altogether from the enormous supply of timber fuel contained in the Province of British Columbia, which is referred to later on, I may direct your attention first to the recognized standard fuel of the world.

Speaking in round figures, the best available estimate indicates that the known coal reserves of the world amount to seven million million of tons. Of this enormous quantity the four Western provinces of Canada contain one million three hundred thousand million of tons. The coals of the Western provinces cover all the different qualities from the lignites up through the semi-bituminous, bituminous cooking, to anthracite, and the vastness of the coal resources, as noted by the above figures, indicates that nature has blessed these Western provinces with one of the vast coal supplies of the world, and has solved the fuel supply, both for domestic and industrial use, for many centuries to come.



The Great Irrigation Dam at Bassano

The coal production in the Provinces of Alberta, Saskatchewan and British Columbia for the year 1917 was 7,352,945 tons. This production will, without doubt, increase rapidly with the extension of settlement and the introduction of additional industries using coal for the generation of power, but the facts quoted will be sufficient to indicate to you that in the matter of coal for fuel this western portion of Canada occupies a most advantageous position.

In this connection attention must also be drawn to the fact that so far we are only utilizing our coal deposits under the wasteful method of its use for fuel only, with the exception, in a few cases, of its conversion into coke. Ultimately no doubt more modern scientific methods will be adopted to utilize our coal deposits on the basis of saving the by-products, and in this way enormously increase the value of this natural resource.

Not satisfied with endowing us so generously with almost inexhaustible quantities of coal, nature has added to her gift, particularly in the Province of Alberta, by furnishing us with vast quantities of natural gas.

During your visits to Medicine Hat and Lethbridge, and also in this city, you have had some opportunity of seeing something of the natural gas development, but it may interest you to know that natural gas has been developed in the Province of Alberta within an area extending from the national boundary north for about 700 miles and from the Rocky Mountains east for 200 miles.

This natural product is now being utilized both for industrial and domestic purposes, and the possibility of its extension as a fuel in generating heat, light and power is almost beyond measure.

You no doubt will also be interested to know in connection with our natural gas supply that investigations lately carried on have proved the possibility of extracting from this gas, at a low cost, the character of gas required for use in the balloons which will probably play an important part in the matter of transportation in the world in the near future.

Associated with our vast coal deposits and the vast natural gas area referred to, it is probable that nature has also blessed this western country with a vast deposit of oil.

We are not justified at present in claiming that we have located and developed a vast oil field in these Western provinces, but the exploratory work so far carried on over an area extending some 700 miles north to south in the Province of Alberta and at one or two isolated points in the adjacent Province of British Columbia, and the oil obtained in small quantities at these widely separated points justify the assumption that somewhere within the Province of Alberta there exists one of the vast deposits of petroleum of the globe, and after having given some special attention to this matter as head of the Canadian Pacific Railway Company's Department of Development, I personally venture the opinion that sooner or later, and in all probability in the near future, a large producing oil field will be located through the medium of some of the many test wells that are now being drilled at widely separated points and when that time comes we will not only have this great addition to our fuel supply but the benefit of the vast number of by-products resulting from the scientific use of crude petroleum.

Timber has always played an important part in assisting in the development of new countries. This is particularly true of the prairie portions of Western America, where the first need of every settler is lumber. In this particular nature has again been exceptionally kind to the four Western Provinces of Canada, for while the prairie Provinces of Manitoba, Saskatchewan and Alberta produce a certain amount of lumber, the lumber needs of the prairie districts of these provinces could not be filled were it not for the vast timbered areas of the Province of British Columbia. This province differs from its three sister provinces to the east in that it is more or less mountainous throughout and only in the valleys

is there opportunity offered for agriculture, horticulture and animal industry, but the province possesses one of the great undeveloped timber areas of the world. Conservative estimates indicate that the commercial standing timber in the Province of British Columbia amounts to 366 billion feet. This timber comprises cedar, Douglas fir, spruce, hemlock, white fir, lodgepole pine, western yellow pine, yellow cypress, western larch, western white pine and cottonwood.

This vast timbered area has already been developed to a certain extent through the medium of sawmills and allied woodworking industries, but the extension of this portion of our industrial activity will offer opportunities for a further investment of capital coincident with our extension of agricultural settlement east of the mountains and of our overseas export lumber business. There would also seem to be an opening for the extension of our wood pulp paper making industry in view of the vast quantities of suitable pulpwood to be found in all these four Western Provinces, and in this connection it is noted that we must endeavor to correct the situation which occurred last year in which Canada exported pulpwood to the value of $15,000,000, whereas this pulpwood manufactured into paper at home at the then existing prices would have realized the sum of $79,000,000.

Clay and Clay Shales

The members of the Congress who visited Medicine Hat had an opportunity of seeing one of the large industrial plants engaged in utilizing our clay deposits. Throughout all the four Western Provinces vast deposits of clay of differing values have been located, and the utilization of these clays through our existing industries justifies us in the claim that we possess in these deposits clay suitable for all purposes from the manufacture of common brick to that of high grade pottery, and this branch of our industrial activity offers opportunities for wide extension.

We have also been able to demonstrate the suitability of certain of our sand deposits in the West for the manufacture of glass, and where these deposits are located in close proximity to our natural gas supply this industry offers an opening for wide development.

The many large lakes situated in the provinces of Manitoba, Saskatchewan and Alberta already provide large quantities of freshwater fish, but our great fishery resource of Western Canada is on the coast line of British Columbia. This coast line covers in extent some 7,000 miles and may reasonably be claimed to provide one of the great fishing industries of the world. This industry has already been developed to considerable limits as will be indicated by the fact that the catch of eight kinds of fish during the year 1918 amounted to 233,000,000 pounds, valued at $22,000,000. The export of a large quantity of this coast fishing industry, together with fresh-water fish from the interior lakes, comprises one of our important industries of the West, but like many other phases of the development of our natural resources is only in its infancy.

Iron Ore an Uncertain Quantity

With unlimited quantities of coal and natural gas as fuel, and the probable addition of crude petroleum to this list, it was only necessary for nature to have blessed Western Canada with a large deposit of iron ore to insure her future as one of the richest countries of the world. In this particular, however, nature seems to have been somewhat sparing in her gifts. We have indications of deposits of iron ore in the Lake Winnipeg district of Manitoba, some smaller deposits in the Provinces of Saskatchewan and Alberta, and probably more important deposits at several points in British Columbia, but as yet, sufficient development has not been completed at any of these points to justify the prophecy as to how far these deposits can be utilized in connection with our fuel to supply the steel which is rapidly becoming one of the most widely used products in the world's development.

Transportation Well Developed

In developing the natural resources of any country, the transportation available not only for the movement of the raw material but of the finished product is a most important factor. The outline given above will, I hope, have served to convey to you the wonderful development which may be looked for in Western Canada through the ultimate utilization of our natural resources, and fortunately the foundation for the rapid development of these resources, through the medium of transportation, has already been laid. In the four Western Provinces we have to-day in operation a railway mileage of 19,873 miles, which provides one mile of railway in operation for each 110 of population. This fact will indicate to you that Western Canada has as great if not greater mileage of railway per capita than any other country in the world. It is, of course, true that the vastness of the country makes it inevitable that even as yet large districts are not served by existing railway lines, but the foundation work for the extension of the system as conditions warrant has already been laid, and from the standpoint of available transportation, Western Canada, with the opportunities offered for agricultural and industrial development through ready transportation of raw material and finished product, occupies a very unique position.

Precious Minerals Known to Exist

The vast mountainous areas of the Province of British Columbia are without doubt one of the most highly mineralized districts of the world. The production of gold, silver, lead, copper, zinc, and some of the smaller miscellaneous minerals, showed the large value of $28,500,000 in 1918. Like the development of all the rest of our natural resources of the West, that of our precious minerals, especially in the Province of British Columbia, is only in its infancy; vast areas of that highly mineralized country having as yet only been roughly explored and prospected.

As was intimated in my opening remarks, I have only endeavored to put before you in an outline manner the natural resources with which Western Canada has been blessed and the steps so far taken to develop them. With the increase of our population, the demand for the finished product of many of these raw materials will increase and the increased demand will, doubtless, result in the extension of our industrial life. This extension, however, will only be possible through the medium of the investment of large sums of capital and the value of meetings of this kind, through which reliable facts may be made public regarding our resources and interest awakened in their proper development, cannot be overestimated.

In common with all new countries, which have undergone more or less rapid development, we have experienced in Western Canada the inevitable land, coal, oil, timber and other booms with concurrent disappointment, in many cases, relative to returns from capital invested with the inevitable retardation of sane development. We, however, know that we have the raw products of agricultural land, coal, gas, oil, clay, timber, precious minerals, etc., and indulge in the prophecy that sooner or later these will all be developed along proper lines and result in making these four Western Provinces of Canada one of the most extensively settled, highly developed and prosperous portions of the British Empire.



An Up-to-Date Coal Mining Plant near Lethbridge

Water Powers and Coal Resources in Alberta*

Province Does Not Possess Large Year-Round Water Powers in Vicinity of Well-Settled Sections, but by Supplementing Them with Steam Powers, Developed from Coal Resources, Should Have Plenty of Power for All Needs

By JAMES WHITE, C.M.G.
Vice-Chairman, Commission of Conservation

POWER has been defined as the "substitution of mechanical energy for human energy, of mechanical work for human labor." As a result of the utilization of power, civilized nations expend enormously more energy than the combined muscular power of their inhabitants and their beasts of burden. Sir Dugald Clark has estimated that the factories of the world, including electric lighting and street railways, use 75,000,000 horse-power; the railways of the world, 21,000,000; and the shipping of the world, 24,000,000, or a total of 120,000,000 horse-power. Fairgrieve, in his "Geography and World Power," says that "the power of Greece, whereby she achieved such great things in all directions of human progress, was largely based upon the work done by the servile class. On the average, each Greek freeman, each Greek family, had five helots, whom we think of not at all when we speak of the Greeks, and yet these were the men who supplied a great part of the Greek energy."

Equivalents in Slave Power

Of the 75,000,000 horse-power used in factories and general industrial and municipal activities, about 13,000,000 is used in the United Kingdom, about 29,000,000 is used in the United States, and 6,000,000 in the British Dominions and dependencies.

The work accomplished annually in the industries alone of the United States is, therefore, equivalent to the labor of 580,000,000 slaves, and each family in the United Kingdom has, in the industries, nearly 30 serfs to "supply energy, requiring no food and feeling nothing of the wear and tear and hopelessness of a servile life."

Having demonstrated the enormous importance of power, the next step is the examination of this particular problem under consideration, namely, power in the Province of Alberta. Water-power, with its numerous advantages, is naturally first in order of consideration. This has been exaggerated, partly due to the impression gained, say, by the traveller who, from the railway train in summer, sees large volumes of water flowing down the beautiful rivers of Alberta. The traveller is not aware, or forgets, that the low water season in the western rivers is not in the driest summer weather, when the glaciers and snow-fields are swelling their volume, but in the coldest winter, when frost seals the ice and snow-fields, and the volume is practically dependent upon the springs that feed the streams.

Height of Falls Available

Another important consideration is the height of the falls that are available. This is a geological question. The Rocky Mountains are, in large part, composed of limestone, with sandstones and shales in some valleys in the eastern portion. The tendency of a river in such rocks is to reduce its bed to a nearly uniform gradient, hence the few falls of considerable height. On the other hand, high dams to create high heads are, in most instances, prohibited by the heavy cost, and, in the case of several important streams, the presence of railways debars such constructions.

So far as water-powers are concerned, Calgary is more favorably situated than any other city in Alberta, the six powers on the Bow River having an aggregate minimum of 60,000 horse-power, with regulated river, and less than one-half that amount with unregulated river. These powers are from 30 to 50 miles in an airline from Calgary.

The Rocky Rapid power on the North Saskatchewan, is 60 miles from Edmonton. To develop this power would require a dam 85 feet high.

The Baptiste power, 12,000 horse-power, on the Athabasca,

* Address delivered before Alberta Industrial Congress, August 13, 1919.

near the mouth of the Baptiste, is 170 miles from Edmonton. Another power, nine miles above the Baptiste power, would yield 6,000 horse-power. The total available at these sites, 18,000 horse-power.

It is estimated that the Grand Rapids of the Athabasca would yield 22,000 horse-power, the Long Rapids power, 12,000 horse-power, Boiler Rapids 11,000 horse-power, Middle Rapid, 9,000 horse-power, Crooked Rapid, 6,000 horse-power; Rock Rapid, 5,000 horse-power; rapid five miles above Mountain Rapid, 7,000 horse-power, and the total power on the Athabasca, between the Pelican Rapids and McMurray, is estimated at 97,000 horse-power. As these powers are from 200 to 250 miles from Edmonton, they cannot be regarded as possibilities at the present time.

Powers Are Far Away

Peace Canyon power, 94,000 horse-power, is 400 miles from Edmonton, and to develop all the power at one site would require a flume or penstock nine miles long; the Vermilion power, 20,000 horse-power, is 350 miles distant; the Upper Fort Smith Rapids, on the Slave, 184,000 horse-power, and the Lower Fort Smith Rapids, 128,000 horse-power, are respectively 460 and 670 miles from Edmonton.

It should be noted here that the figures for the powers on the Athabasca, Peace and Slave rivers, given in the report on "Water Powers of Manitoba, Saskatchewan and Alberta," are for the open season only, namely, from May to November. Accurate data respecting the minimum flow of these rivers are not obtainable, but available information indicates that the minimum in winter is about one-third of the open season minimum, and the figures quoted above are based upon that assumption.

The foregoing brief review of the larger water-powers of Alberta does not indicate great resources in the vicinity of the well-settled portions of the province, assuming that the demand for power is uniform throughout the twelve months of the year. It is necessary, therefore, to consider measures to supplement or to replace power from water.

With Alberta's enormous coal resources, however, the deficient power during the low water months could readily be supplied by auxiliary steam plants. Such plants could also take care of the peaks of the loads.

If such auxiliary stations are only required for a few months in the year, it may be advisable to construct them at low first cost, even at a sacrifice in economy. If operated to cut down the peak load, however, or to prevent interruptions of service, economy of operation is more important.

Steam Power vs. Water Power

In the foregoing review, attention has been devoted solely to water power and its utilization.

There is a fairly general popular belief that water power is inherently cheaper than steam power. As a matter of fact, their relative costs are dependent upon a number of considerations, and, in many instances, steam power is cheaper than water power, particularly since 1914, owing to the altered conditions created by the war.

As compared with steam power, water power has the following advantages:

(1) Cost of operation is usually much lower.
(2) Very few attendants are required in the plant. No fuel except for heating the building.

The disadvantages are:

(1) Usually the cost of development and installation is much higher than with steam power.
(2) The situation of the water power plant is fixed by nature, and, as a rule, a transmission line is required to transmit the electric energy to the user.
(3) The service is less reliable owing to the possibility (*a*) injury to the transmission line, and (*b*) lack of power due to unusually low water.

During recent years, largely owing to the introduction of the steam turbine, the capital costs of modern high-powered steam plants and of many hydro-electric developments are coming close together, and many engineers predict that, at an early date, steam-electric power will be produced at less expense, other things being equal, than hydro-electric energy. Formerly steam plants consumed 30 to 35 lbs. coal per horse-power hour; now modern plants use nine to nine and a half lbs. In 1915, a modern steam turbine of large size, using units of 10,000 to 20,000 kilowatts (13,300 to 26,600 horse-power) rating could be constructed for from $50 to $60 per kilowatt of maximum capacity as compared with hydro-electric costing from $200 to $250 per kilowatt.

Alberta contains 87 per cent. of the coal in Canada, but the estimate in the "Coal Resources of the world," states that 82 per cent. of the coal in that province is lignite or sub-bituminous. Practically the whole of the settled portion of the province is underlain by this valuable fuel, and the relative costs of steam-electric and hydro-electric power, indicate the desirability of investigating the economics of steam-electric power generated at central stations and transmitted to the municipalities within say 100 to 120 miles.

The larger coal mining centres could be selected because such large central plants give unusual opportunities for economies. For instance, they can use coal that under ordinary circumstances, would be left in the mine, as it would be unprofitable to bring it to the surface. As an example of such economy, the Alliance Coal Company states that "by burning lignite slack they have succeeded in reducing the coal bill in the Edmonton, Alta., power house from $165,000 a year to $75,000;" also that if an automatic stoker were devised which would "respond and evaporate the necessary water in the boilers to handle the overload at peak," much better results could be obtained.

Electrification of Railways

While extension of the electrification of steam railways in the near future is probable, there are several factors in the problem which render it extremely unlikely that a very considerable mileage will be electrified.

The advantages of haulage by electric locomotive, as compared with the steam locomotive, are numerous. The cost of maintenance of an electric locomotive is much less, it does not require to be sent into the round house for cleaning, etc., at the end of a run, two or more can be operated together without loss of power, at the top of a long grade, the electric retains its full power and on long descending grades, regenerative braking returns the energy of the train into the trolley line or third rail, and in severe winter weather the train load need not be reduced.

On the other hand, electrification would necessitate raising large amounts of capital; railways are not finding that an easy operation, and interest charges are much higher than in pre-war days. Electrification of all lines would require the construction of hydro-electric and steam-electric plants. The railway load is a fluctuating one, varying from hour to hour and from day to day, and the numerous plants which had no market other than the railway load would have a low load factor, which, as already pointed out, means expensive power. Again, failure of portions of the electric installation, such as break in the transmission line, may tie up considerable mileage.

Mr. W. F. Tye has stated that no road in Canada, except possibly the Canadian Pacific, is in a position financially to contemplate large capital expenditures, and that he understands the "Canadian Pacific has not as yet, found a place where the traffic is sufficiently dense to justify the cost of installation of electric traction."

Making Most of Canada's Natural Resources*

Imperative Need of the Day is a National Economic Policy Based on the Scientific Development and Utilization of Our Natural Resources—We are Importing Far Too Much of the Raw Materials of Industry

By R D. MacLAURIN, B.A., Ph.D.
Professor of Chemistry, University of Saskatchewan

"DURING the past five years Canada's national debt has rapidly increased until it has reached the sum of $1,950,000,000, incurring interest charges to the amount of $115,000,000. Our adverse balance of trade with the United States in 1918 mounted to $292,000,000 and our exchange rate is five and one-eighth per cent.

"The recommendation by the finance minister of Canada to meet that situation was 'increased production and thrift.'

"The war made it necessary for Canada to mortgage her resources, human and material, for the purpose of carrying on. The obligations were loyally and willingly assumed, but we are now confronted with the question—How is the liability to be financed? Will 'increased production and thrift' accomplish this?

"The imperative need in Canada to-day is a national economic policy based on the scientific development and utilization of our national resources. An outstanding feature of that policy should provide for participation by the state in the results of that development, small in the initial stages, but in an increasing ratio as development and revenue therefrom advances. Canadian credit in general would benefit from such a provision for participation, and should the proceeds remain the property of the Dominion, a sinking fund for the discharge of federal indebtedness would be created.

"The necessity for such a policy is evidenced by the fact that we import 98 per cent. of our petroleum products at an annual cost of 30 millions of dollars; 95 per cent. of our iron ore and iron products, at a cost of 177 millions of dollars, and over 50 per cent. of our coal, at a cost of 71 millions of dollars, making a total of 278 millions of dollars annually drained from Canada for those three minerals. That amount constitutes the major part of our adverse balance of trade. Canada is richly endowed in coal, oil and iron. To retain those millions of dollars in Canada, to extinguish the adverse balance of trade, to make Canada industrially independent, no time should be lost in inaugurating a policy for the development of our raw materials.

"For the successful carrying out of a policy formulated for the development of our natural resources the co-operation of men of scientific attainments is essential. In 1916, in urging the development of our resources, I suggested that provision be made in the case of a research subsidized by the government and leading to a discovery, invention, or the improvement of a technical process, protecting the author in the ownership thereof. As government aid had, at least, materially contributed to such discovery, invention or improvement of a technical process, provision should also be made for a royalty to the Government on its use for the purpose of maintaining a national research fund.



Members of the Medicine Hat Section, C.M.A.

Front row, left to right: W. E. Bray, Manager, Hedley Shaw Milling Co., Limited; W. A. Church, Manager, The Alberta Linseed Oil Co., Ltd., Secretary Local Branch, C.M.A.; Chas. Pratt, Manager, Medalta Stoneware, Ltd. (Chairman); R. P. Stewart, Manager, Alberta Clay Products, Ltd.; George Preston, Manager, The Lake of the Woods Milling Co., Ltd. Back row, left to right: G. W. Elliott, Manager, Medicine Hat Pump & Brass Works, Ltd.; C. L. White, Martin and Phillips; J. H. Preston, The J. H. Preston Planing Mills; V. W. Parrish, The Alberta Foundry and Machine Co, Ltd.; J. H. Tabor, J. H. Tabor Candy Co., Ltd.; Geo. E. McDonald, Medicine Hat Pump and Brass Works; A. F. Andrews, Manager, Ogilvie Flour Mills, Ltd.

"The creation by the Alberta Government of a ministry of industry, and the calling of this Industrial Congress by the Industrial Development Association of Alberta, whose guests we are, is an outstanding recognition of the value of Alberta's natural resources, and a realization of the urgency for their immediate development.

"The Dominion of Canada ranks second among the nations of the world as regards its potential coal resources, which have been estimated at 1,234,269 million tons, of which 1,059,927 million tons, or 86 per cent. of the total, is possessed by the province of Alberta. Furthermore, the total coal in Great Britain and Ireland, Australia, India, South Africa, New Zealand, Rhodesia, Newfoundland, South Nigeria, British N. Borneo has been estimated at 494,961 million tons;

* Address delivered before Alberta Industrial Congress at Calgary, August 14, 1919.

consequently, according to the above figures, Alberta contains more than twice as much coal as Great Britain and her other possessions within the Empire.

"In order to more fully appreciate the national significance of coal, it may be advisable to refer briefly to the part which it has played in the constructive economic policies of certain countries.—

Cheap Coal Cause of Supremacy

"Great Britain gained her position in the world's commerce very largely by reason of her plentiful supply of cheap coal, which enabled her not only to pay for a considerable portion of imports, but exercised a very potent influence on inward freights of food and raw materials by providing a useful and paying return cargo. The influence of cheap coal, cheap food and raw materials on the cost of manufacturing is so obvious that it need not be emphasized. To day Great Britain faces a national crisis in her coal trade, as is evidenced by a decrease in production of over 20 per cent. during the past five years, and a decrease in exports during the same period of 56.7 per cent. Furthermore, the cost of production has increased to such an extent that successful competition with the United States in the South American and European markets is endangered.

"In order to visualize the national significance of coal in industrial Germany, it is essential to keep in mind the meaning of the distillation of coal, which process was the cornerstone of her economic structure for peace and war. Crude coal tar was the raw material from which dyes, pharmaceutical and photographic preparations were obtained, and Germany gained control of the greater part of the world's trade in those chemicals. Furthermore, the same compounds used in making dyes, etc., were those from which explosives and poisonous gases were made, consequently Germany has the chemical plants, equipment and personnel for manufacturing unlimited quantities of the above materials. The coke and gas from the distillation of coal was used in the iron, steel and other metallurgical industries. The ammonia was used for fertilizers, the manufacture of nitrates and other chemicals; consequently it is apparent that Germany prepared for peace and war by building up essential chemical industries, the products of which controlled the world's market in war materials, thus establishing a profitable foreign trade and at the same time preventing other countries from building up those fundamental industries and being prepared for war.

"During the war, the coal distillation process was necessarily extensively developed in England, and also in the United States, so that now those countries are largely independent of German supplies in dyes and other chemicals, but the cost of production is still considerably higher than that of Germany.

"The government of the United States recognizes as never before the national significance of coal, and is co-operating in the development of the coal industry. The United States has adopted the former British economic policy of exporting coal, as is evidenced by an increase of 243 per cent. in her coal export to Europe, and 350 per cent. to South America, and the German economic policy of building up national industries, utilizing the products of coal distillation. These industries have been established during the past few years at an expenditure of hundreds of millions of dollars, the products of which will be protected by license system. As the United States possesses 51 per cent. of the world's total supply of coal, and produced last year 685,000,000 tons, while all the other countries in the world outside Great Britain produced only 500,000,000 tons, it is obvious that the United States will occupy a strategic position in the world's trade.

"As already pointed out, Canada ranks second in coal resources, of which Alberta possesses 86 per cent., and as the vital national significance of coal has been incontrovertibly established, it is apparent that Alberta is destined to become one of the chief industrial provinces in Canada.

"Alberta coal has not received its due recognition, its capability, for instance, to successfully compete with Pennsylvania anthracite for the Manitoba market, owing to, firstly, the high cost of production, due to avoidable overhead charges; secondly, existing belief that Alberta coal is unsuitable as a domestic fuel (with consequent large importations of Pennsylvania anthracite); thirdly, present inefficient methods of combustion, due to furnaces now in use being designed for anthracite coal.

Agriculture and Industry

"A phase of this subject which might be touched on is the close relation between agriculture and industrial development. While agriculture, our basic natural industry, has been fostered, the fact remains that our average crop yields are still far below those of many countries. The history of agricultural science in various European countries shows that the full measure of success can only be attained by intelligent mixed farming supplemented by artificial fertilization.

"The soil possesses only a limited quantity of plant nutrients, and since a portion of that source of supply is removed by each crop, the time will inevitably come when the quantity of essential constituents will be insufficient to produce paying crops.

"To bring before us clearly the importance of conserving our soil's strength, its wealth in plant food, by home milling,



Plant at Medicine Hat Manufacturing Various Clay Products



One of the Big Flour Mills at Medicine Hat

I have made the following calculation of the fertilizing constituents contained in one hundred million bushels of wheat and forever lost to us should the 100,000,000 bushels be shipped out of the province. As, however, in the milling of wheat, 70 per cent. approximately, is converted into flour, the by-products being represented by the remaining 30 per cent., it would follow that home milling would retrieve the latter percentage for stock-feeding purposes, and a consequent ultimate return to the soil.

"The approximate quantity of potassium, nitrogen and phosphorus removed from the soil by 100,000,000 bushels of wheat is:

Nitrogen, 142,000,000 lbs, valued at 36 3-7c. lb.....	$51,720,000
Phosphorus, 24,000,000 lbs., valued at $21.46 cwt...	5,150,000
Potassium, 26,000,000 lbs., valued at 31.62c. lb.	8,220,000
	$65,090,000

"That exportation of flour rather than wheat is a sound economic policy has been recognized by the United States Congress. The Wheat Guarantee Law of March 4, 1919, in Clause 5, contains the following provision:

"'That as between the two parties mentioned (wheat and flour) preference shall be given to the exportation of flour, except when the public interest would, in the judgment of the president, be injuriously affected thereby.'

Straw Burning Loss

"A brief allusion to the loss from burning of straw may be of interest. When the straw is burned the fertilizing constituents are practically all wasted. The approximate quantity and value of nitrogen, phosphorus, potassium in straw resulting from 100,000,000 bushel yield of wheat, calculated on the basis of 15 bushels to the acre and one ton of straw per acre, is as follows:

66,666,660 lbs. nitrogen, at 36 3-7c. per lb.	$24,285,711
10,666,665 lbs. phosphorus, $21.46 per cwt.	2,289,042
119,999,998 lbs. potassium, 31.6c per lb.	36,919,915
	$63,494,668

"Some years ago Mr. George Harrison, of Moose Jaw, conceived the idea of utilizing straw to provide the farmer with gas for lighting, cooking and power purposes. The necessary equipment consists of a retort, gas scrubber and gasometer. When the straw is heated in a retort, gas, tar and ammonia are given off, and a valuable carbon residue remains. From a ton of straw there is obtained between 11,000 and 12,000 cubic feet of gas. Straw or gas may be used for heating the retort in which the straw is carbonized, and from each ton of straw there is a surplus of about 7,000 cubic feet of gas.

Straw Not Utilized

"The quantity of straw non-utilized in western Canada is approximately 20,000,000 tons.

"The heating value of straw gas is approximately 400 B. T. U.'s per cubic foot. The gas from 20,000,000 tons of straw, at 7,000 cubic feet per ton, in terms of power, would be equal to 2,511,000 H. P. years, or seven times the power generated at Niagara Falls on the Canadian side. As a matter of fact, then, every farmer has a small Niagara of his own. The thermal value of a gallon of gasoline is 119,000 B. T. U.'s, so in terms of gasoline the gas from the straw wasted annually in western Canada would be 470,000,000 gallons, which is more than one-sixth of the total production of gasoline in the U. S. A., and the U. S. A. produces two-thirds of the world's total supply of oil.

"The combustible constituents of the gas are methane, hydrogen and carbon monoxide. The gas burns with a blue flame and may be used in the same way and for similar purposes as coal gas.

"After the gas and other by-products are driven off from the straw there remains in the retort a carbon residue which amounts to 650 pounds from each ton of straw. The residue has a fuel value of 10,000 B. T. U.'s per pound.

"The potash content of the carbon residue varies from 3-6 per cent., so the minimum amount of (K_2O) potash in the carbon residue from 20,000,000 tons of straw would be 180,000 tons.

"Also the carbon residue contains from 1-1.5 per cent of ammonia and .34 per cent phosphoric acid. The carbon residue can be easily washed and thereby remove the soluble matter. After this treatment the carbon may be used as lampblack. It has been valued at $50 per ton by a well-known authority on pigments in New York, so if a market could be secured for six million tons of carbon resulting from 20,000,000 tons of straw it would be worth $300,000,000.

"In conclusion let me say that sufficient work for carbonizing straw has been done to demonstrate its commercial possibilities. The United States department of Agriculture

and bureau of chemistry co-operated with me in New York city, September 1918, in exhibiting at the National Exposition of Chemical Industries an equipment based on Mr. George Harrison's invention, and the United States Bureau of Chemistry have installed a straw gas plant at Arlington farm in the neighborhood of Washington, with the object of continuing experiments on straw and also cornstalks, of which latter approximately two hundred million tons are wasted annually in the United States."

Factories Hold Population

West Will Lose Surplus Population Unless it Establishes Industries

Speaking before the Alberta Industrial Congress at its inaugural session in Calgary, R. T. Riley, of Winnipeg, vice-president of the Union Bank of Canada; managing director of the Northern Trust Co., and director of the Canadian National Railways, had some pertinent comments to make on the general situation.

"What this country is going to amount to," declared Mr. Riley, "depends not so much on the resources of which we have heard this morning, but upon the character of the men who undertake the development of these resources. Don't try to make every last cent—be more interested in building up a good, fair business or factory."

"You've either got to establish industries and factories or you will lose your surplus population in exactly the way that Ontario did. You have built up merchandizing centres in this country," said Mr. Riley; "you must start manufacturing centres. Are you going to risk your money in this line or are you going to let things drift? Don't imagine you will get all the money you will need from the States or the east. The men who have made their money here must put it back into production here.

"But someone says, 'we have no cheap labor.' We don't want cheap labor," said Mr. Riley, emphatically. "What we want is efficient labor." (Applause.)

When Mr. Riley declared that he hoped and prayed that the country from the lakes to the mountains would be settled by English-speaking people, the big audience applauded him.

"We've had enough of the foreigner from Europe," he declared. "When the European comes here he does not know the language. It is at least the second generation before these settlers are of real use. We must have the English-speaking settler in order properly to develop this country."

A Big Conservation Dam

How the Flow of Water in the Spanish River Will be Regulated in Future

(From "Conservation")

A water conservation work of vast importance is that at present under construction at Big Eddy, on the Spanish river, Algoma district, Ont., for the International Nickel Co. The conservation dam will raise the level of the river 100 feet, and will create a lake with an area of 15 square miles. Combined with the storage in the upper third of the Spanish River watershed, it will increase the minimum flow to over 1,800 cubic feet per second, or almost three times the natural low-water flow, *viz.*, 675 cubic feet per second. It will also create a power site where 15,000 h.p. can be continuously developed.

The engineer who designed this work, Mr. Henry Holgate, of Montreal, in reporting on the matter to the Commission of Conservation, states that:

"When this work is complete, the waters of the Spanish River above the Township of Hyman will be conserved to their full extent, and this will be one of the most complete systems of water conservation in Canada.

"Conserving water, and regulating flow on our streams, is one of the most important subjects we have before us, and merits the co-operation and assistance of the Government, as it should be a cardinal principle in power development that the full efficiency of the water in the watershed be made use of, and this cannot be done unless carefully considered systems of storage are provided, so as to equalize the flow as nearly as possible throughout all seasons of the year."

New Price List Issued

Mills Adopt a New Standard in Pricing Cold Rolled, Cold Drawn, Turned and Polished Steel

A new price list has been issued by the United States mills, and adopted by the Canadian mills, for cold rolled, cold drawn, turned and polished steel, and as there is apt to be confusion in the minds of buyers when the new list comes out with such radical changes, an explanation of this list may be a help to readers.

Ever since cold drawn steel appeared on the market, it has been sold on the basis of a list price for the various sizes and shapes, with a discount which varied according to the market; therefore all quotations were made in the form of a discount. The new list now takes the same form as the hot rolled steel, or iron bars, namely, a base price with extra for size and shape. It is only necessary for the buyer to know the base price and to add the extra for the particular size or sizes he may be ordering. The base price applies to all material covered by the new price list, that is, the same price base is applicable to rounds, squares, hexagons and flats, or other shapes. It is not necessary to remember the list price of each individual size, and take the discount from it, but all that is required is to remember the extra that the different sizes take over the base price.

A New Product

Hamilton Motor Works, Limited, Manufacture Hand Oil Pump for Attachment to Oil Barrels

Among new products being produced by Canadian manufacturers is a hand oil pump for which the Hamilton Motor Works, Limited, are responsible. The purpose of the pump is to do away with the waste and fire hazard more or less inseparable from the use of the ordinary type of faucet when attached to a barrel of oil. With the hand oil pump any desired quantity may be drawn from the barrel and it does away with the oil-soaked floor and waste of oil. There are two adjustable stops on the pump so that it can be set to pump any desired quantity up to one quart. There is also a lock with two keys provided, so that the apparatus can be locked up.

New Paper Products

The Rolland Paper Company, Limited, are introducing a new Canadian paper product—Rolland Antique Linen and Rolland Antique Vellum—and have been sending out samples. Rolland Antique is a superior paper of pleasing and distinctive appearance. It is strong and durable with a clear, even texture, and is recommended for the better class of letterhead, whether printed, embossed or lithographed.

The Newmarket Explosion—a Danger Signal

What About Your Feed Water?—Root of the Trouble at Newmarket Appears to Have Been Due to Action of Chemical Constituents in Fluid Drawn from an Artesian Well, Causing Caustic Embrittlement of Plates

By A. E. EDKINS

Chief Inspector, Boiler Inspection and Insurance Co. of Canada

WHILE it is now some time since the disastrous boiler explosion occurred at the plant of the Wm. Cane & Sons Co., Limited, Newmarket, it is only recently that the investigation into the causes of the disaster has been completed, making possible a review of the circumstances surrounding the accident. It goes without saying that the explosion gave much food for thought and study among engineers, boiler inspectors and mechanical men generally, while it proved to be just another striking example of how, after every human precaution seems to have been taken to make the use of steam boilers safe in industrial establishments, explosions may and do occur.

The boiler that failed was one of two, double-drum B. & W. boilers, built in Great Britain, and of standard design and construction for 150 lbs. working pressure.

The two boilers were installed in 1903 to replace four H.T. boilers, one of which had exploded causing the death of two persons and also considerable property loss. The explosion of this H.T. boiler was definitely traced to a longitudinal lap crack defect, such as occasionally occurs in that type of boiler construction, it being a defect which is very hard and sometimes impossible to detect. Wm. Cane & Sons, after their experience with the explosion of this H.T. boiler, decided to install the B. & W. boilers, even though it entailed a much greater expense, as such boilers were thought to be practically immune from explosion.

After the B. & W. boilers had been in service a few years they both began to give evidence of trouble by leakage and cracking at cross-box flange seams. The cracks ran from rivet holes to edge of plate and were very slight at first, not being considered in any way serious. However they increased gradually each year, and finally cracks began to develop from rivet hole to rivet hole. The leakage and defects became so serious that in 1914 new cross-boxes were ordered to be put on. When the old cross-boxes were removed it was found that the steel plate in the flanges was so hard and brittle that it would break off like cast-iron under a smart blow with a hammer.

It was also found that cracks had developed between the rivet holes in the shell plates of steam and water drums at the cross-box flange seams, making it necessary to put in new half sheets at each end of drums where these defects had developed. Considerable thought was given to try and locate the cause of the defects referred to, but no satisfactory solution was forthcoming. The repairs were made in a first-class manner and the boilers were tested on completion by an Inspector of the Boiler Inspection & Insurance Co. of Canada, and an Inspector of the Ontario Government Department to 225 lbs. hydrostatic pressure, being allowed 150 lbs. working pressure. It was thought by everyone interested that the trouble with these boilers was now at an end (as it had been assumed that perhaps it might have resulted from the plates being too high in carbon, or the workmanship—rivetting—inferior). It was, therefore, a great surprise to all concerned when, after about two years operation lap cracks and leakage began to develop again at the cross-box flange seams of both these boilers, and to cap the climax, on June 12th, No. 2 boiler exploded.



Appalling Effect of the Explosion

Photograph of the wrecked portion of the plant, taken immediately after the bursting of the boiler; the latter may be seen in the centre background

The writer on being advised of the disaster by telephone, immediately took the car out to Newmarket and was on the spot examining the exploded boiler within 2½ hours after the accident occurred, and therefore saw condition of boiler and the appearance of fracture of plate before any change, due to atmospheric conditions, could take place.

The rear head of the left hand drum of No. 2 boiler had blown out as a result of a crack having developed in the lap of the flange of the head for

nearly two-thirds of its circumference, said crack having started from the outer surface of the plate, where it was hidden from view by the plate of the steam and water drum. In places from and below about the water line, the crack had extended nearly through the plate of the head, running circumferentially just outside and in some places just into the edge of rivet holes of the head flange seam. It was evident that the rear head had first given way at the bottom side where the crack had extended nearly through the plate and from which point up to about the water line the fracture showed that the plate had become of a very brittle or crystalized nature, very much like cast metal, while the part of the head at the top which had remained attached to the drum, and which had been severed by the force of the failure of the lower part of the head showed a reduction of about 20 per cent. in area, and the fracture had every appearance of good homogeneous, ductile steel plate of good quality, while, as before stated, the plate at the fracture from and below the water line had the appearance of being just the reverse in quality.

> "I WOULD advise all steam users who draw their boiler feed water from artesian wells to have a sample of water analyzed at once and thus make sure whether or not it contains anything in its composition that would have a tendency to cause deterioration of boilers by 'embrittlement' of the plate."
>
> —A. E. EDKINS

This fact, coupled with the defects and trouble that had formerly occurred with the original and the renewal cross-box flange seams, would indicate that no fault could be found with either the original quality of the plate or the workmanship of boiler, but seemed to indicate that some deterioration of the plate had gradually ensued from some obscure cause after boiler was put into operation. After consultation with Mr. S. F. Jeter, Chief Engineer of the Hartford Steam Boiler Inspection & Insurance Co., and Mr. Coombe of the Babcock and Wilcox Co., the conclusion was reached, that the accident occurred as a result of embrittlement of the plate of boiler through the action of some ingredient in the feed water, which under certain conditions, as to temperature, etc., has been found to have such an effect on steel boiler plate. Chemical analysis of the feed water from the artesian well from which a part of the feed for the boiler in question was taken, has been made in the laboratory of the Babcock and Wilcox Co., who report that said water contains a considerable quantity of chemical constituent that would cause embrittlement of steel boiler plate. Chemical analysis of the plate of the head of boiler which failed has been made by the Chemical Department of the Hartford Steam Boiler Inspection and Insurance Co., which has proved that the plate in question was in a highly embrittled state, and it would seem that the accident to this boiler can only be satisfactorily accounted for as a result of the "Caustic Embrittlement Theory."

The University of Illinois Engineering Department has made tests and experiments, which have proved, that, with boilers using feed water from artesian wells containing certain constituents of an alkaline nature, the steel plates of boilers may become affected by embrittlement, and I understand that further tests are to be made in this institution, with a view to gaining more definite information in regard to the matter.

The Wm. Cane & Sons Mfg. Co. are having four entire new drums put on their two B. & W. boilers, and have decided to change the source of their boiler feed water from the artesian well, and take it from the river after passing it through a filter chamber.

The Functions of Canada's New Office in New York

By J. T. STIRRETT
General Secretary, Canadian Manufacturers Association

CANADIAN business men will be interested in the opening of a Canadian Government Office at 1463 Broadway, New York. It is known as the Canadian Bureau of Information and is in charge of Lt.-Col. John A. Cooper, a well-known journalist, who has recently returned from service overseas.

The primary object of the Bureau will be the maintenance of friendly relations between the United States and Canada. The trade between the two countries has reached tremendous proportions and is still growing. Canada is now selling over four hundred million dollars worth of products annually to the United States, or three times as much as in 1913. Similarly the sales of United States goods in Canada have grown just as rapidly and now amount to about eight hundred million annually. The total trade between the two countries has been multiplied by ten in the past twenty years.

Just what the future development will be remains to be seen. As the United States is now selling Canada twice as much as it buys, it is reasonable to assume that Canada's exports are likely to increase faster than her imports. It will be difficult to maintain the present situation where Canada must pay $400,000,000 in cash to cover the excess of United States sales to Canada. Already the rate of exchange is an indication of the difficulty of maintaining this condition. Col. Cooper reports that his preliminary investigations indicate that the United States manufacturers realize the gravity of the situation and are urging the authorities to consider the financial difficulties raised by the rise in exchange. They fear that the Canadian Government may be forced to put an embargo on the entry into this country of certain forms of luxuries as was done during the war. Even if that does not occur, they fear that the Canadian consumer will not pay the extra five per cent. which is added to the cost of United States imports through the working of the exchange.

Col. Cooper's business will be to supply the United States newspaper writers, financiers and exporters with the fullest information about the Canadian situation and thus facilitate any movement of American capital to this country which may be found necessary. As the annual national income of the United States is estimated at over 50,000 million dollars, it would be easy for the United States to spare the 400 millions required to finance Canada's present purchases.

Any Canadian exporter desiring to increase his sales in the United States is invited to consult the New York Bureau, as it may be able to render him assistance.

What Has Happened to Our Express Rates

Radical Changes in the Basis of Rates May Look Somewhat Complicated in the Railway Board's Forty-eight page Judgment, but they will be Readily Grasped after a Perusal of the Following Summary

By S. B. BROWN
Assistant Manager, Transportation Department, C.M.A.

AFTER wrestling with the express companies' case from November of last year until July of this year, the Board of Railway Commissioners for Canada has at last completed its task and a lengthy judgment extending to 48 pages of its reports has been issued. The case originated with an application from the express companies for increased rates and involved the allied questions of charges, practices, classification and delivery limits. It was made the subject of numerous hearings and much argument and eventually radical changes have been allowed by the Board in the basis of rates, method of statement of rates in tariffs and basis of delivery limits. For the benefit of readers of INDUSTRIAL CANADA, who may not feel inclined to plough through the intricacies of the judgment itself, the following summary has been prepared.

Basis for Making Rates

Division of Territory.—The application proposed to divide the Dominion of Canada for express rate making purposes into three zones, as follows:

(*a*) East of and including Windsor, Sarnia, Sudbury, Ont. (except Temiskaming & Northern Ontario Railway) and Parent, P.Q.

(*b*) West of Sudbury and Parent (including Temiskaming & Northern Ontario Railway) to and including Crow's Nest, B.C., Canmore, Edson and Tollerton, Alta., also on interchange traffic between (*b*) and (*a*).

(*c*) West of and including Crow's Nest, B.C., Canmore, Edson and Tollerton, Alta., also on interchange traffic between (*c*) and (*a*) or (*b*).

The Board in its judgment allowed this grouping. The arrangement is practically the same as at present except that traffic moving from Zone (*a*) to points on the T. & N. O. are now made by taking rates under present Scale (*a*) and adding 25c. to each rate. Vancouver Island, now having a slightly lower scale than the present rates in B.C., has been added to zone (*c*).

First Class Mileage Scale

Prince Edward Island has been added to zone (*a*). Formerly rates to the Island were made by adding arbitrary for the ferry service. Now it will be the through rate under zone (*a*).

Merchandise or First Class Mileage Scale.—The application proposed to establish rates on a mileage basis starting at 50 miles and advancing by 50 mile blocks to 2,000 miles in zone (*a*); to 3,400 miles in (*b*) and to 4,000 miles in (*c*), the greater distances in (*b*) and (*c*) being required for the purpose of naming joint rates between the different zones; the rates beginning at 80c. per zone (*a*); 85c. for (*b*) and 90c. for (*c*), and advancing by 20c. in zone (*a*); 25c. in zone (*b*) and 30c. in zone (*c*), for each block up to 1,000 miles. Over this distance the advance in the scale tapered in a somewhat irregular manner from 15c. to 5c. per block in (*a*); from 20c. to 10c. in (*b*) and from 25c. to 15c. in (*c*).

The irregularities in the scale over 1,000 miles caused the Board to order a modification so that the scale would be made more regular, the judgment, page 158, setting forth the following scale:

						Per Block		
						A	*B*	*C*
Over	1,000	miles	to	1,200	miles.....	15c.	20c.	25c.
"	1,200	"	"	1,800	"	10	15	20
"	1,800	"	"	2,000	"	5	10	15
"	2,000	"	"	2,500	"	..	10	10
"	2,500	"	"	3,400	"	..	5	5
"	3,400	"	"	4,000	"	..	..	5

After making a study of the statements filed by the express companies and the railway companies, the Board came to the conclusion (page 148) that the basis for rail service (which covers transportation movement from point of origin to destination) should be 1½ times the average first class standard freight rate, which amounts to 20c. per block in zone (*a*); 25c. per block in zone (*b*) and 30c. per block in zone (*c*) up to 1,000 miles, after which the scale as hereinbefore mentioned is applied. (In this connection see tables at pages 152 and 153 of Judgment.)

The Board also found that the proper amount to cover the express companies' service should be 60c. per 100 pounds, or 30c. each at point of origin and point of destination. The work of the express companies consists of billing, loading at point of origin, care by messenger in transit, unloading at point of destination, collection and delivery where such services are established, necessary clerical work and auditing, together with liability for loss and damage claims. This amount is the same as named in the application of the express companies.

Second Class Rates

Comparisons of the present and proposed rates in the three zones will be found on pages 155 and 157 of the Judgment.

Scale "N" or Second Class Rates.—At the present time Scale "N" covers more or less perishable articles made up mainly of products of the farm and fisheries (see page 160 of Judgment). The rates for this scale are per 100 lbs. approximately 80 per cent. of the mdse. rate. The express companies in their application have changed this scale to read "Second Class" and have made it per 100 lbs., 75 per cent. of the first class rate, which the Board allowed.

Scale "K."—This scale at present covers various beverages (see page 166 of Judgment). The rates named therein range from 25 per cent. to 40 per cent. below mdse. rates. The express companies proposed to eliminate this scale and apply the new first class rates. The Board, however, found that the articles named in Scale "K" properly belong in the new second class scale, which as hereinbefore stated will be 75 per cent of the first class rates per 100 pounds.

Section "D."—This section applies on books, calendars, circulars, and other printed matter, etc. (See page 165 of Judgment.) The rate charged is 1c. for each two ounces or fraction thereof, subject to a minimum charge of 10c. for each zone except on shipments between points one of which is east of Sudbury and the other west of Winnipeg, in which

case the minimum charge is 15c. The liability is limited to $10.00 per shipment and the weight to 5 pounds, except single books which are limited to 10 pounds. The application of the express companies to cancel this section has been allowed by the Board on the grounds that it was established in competition with the post office, and being competitive the express companies have the right to withdraw it when they see fit.

500 Pound Special.—This scale covers shipments in lots of 500 pounds and over, and was established apparently for the purpose of securing shipments which might otherwise move by freight, and is therefore of a competitive nature. The rates are on the average 22 per cent. below the mdse. rates, and as this is not as low as Scale "N" or Scale "K" such traffic did not move under it. The Board finds that the scale is discriminatory in that it gives larger shippers an advantage over smaller ones, and orders it cancelled. The application of the express companies desired this action.

Commodity Rates

Commodity Rates.—In addition to the "Mdse.", "Scale N," "Scale K," "Section D" and the "500 Pound Special," the express companies have a number of commodity rates applicable to staple food products, chiefly fish, (fresh, dried or smoked), fruit and vegetables. The express companies proposed to eliminate all of these commodity rates and apply the new first or second class rates, whichever would be applicable. The effect of this, particularly on the fish, fruit and cream, would mean an enormous increase in a product which necessarily could not bear but a small, if any, advance at the present time. The rate from Vancouver to Montreal is now $3.00, and the proposal would advance it to $7.20 per 100 pounds. The Board accordingly took the stand that no advance should be made in these rates. However, a slight modification was made in regard to collection and delivery service in connection with such rates, requiring that commodity rates for less than carload should not include the collection service but must include the delivery service at destination. Carload rates must be entirely exclusive of collection or delivery service, but the express companies must switch the cars to team tracks adjacent to passenger stations convenient for unloading without additional charge.

Empty cream cans which are returned at a nominal charge of 5c., including collection by waggon, will in future be exclusive of this collection.

The question of allowing carload shipments of fruit the privilege of partial unloading in transit was given consideration and the Board found that at the present time the express companies allow one opening for this purpose at the charge of $5.00, whereas in the United States two openings are allowed. Accordingly it is ordered that two openings shall be allowed at a charge of $5.00 per opening.

Ruling on Joint Rates

Joint Rates.—A very important portion of the decision is that outlined on page 169, which states that no higher rates shall be charged for carriage where the services of two or more companies have to be used than for a similar mileage to a single company, in other words, joint rates are established on a single line basis.

At the present time such joint movements are charged the aggregate of each company's rate on shipments of 100 pounds and over, shipments of less than 100 pounds taking the graduated charges as appear under such aggregate rate.

The express companies at a hearing in Montreal in connection with this question supplemented their application by filing information to the effect that they desired to state the new rates shown in the application in what are commonly known as "block tariffs" with a view to simplicity in stating rates.

Division of Dominion Into Blocks.—The international tariffs naming rates from Canada to the United States and in the opposite direction have been arranged by dividing the Dominion of Canada into blocks similar to those in effect in the United States, beginning in number from the 49th parallel. The first block is 5,819 at Alberni, B.C., the numbers following along the 49th parallel to Cochrane, Ont. The blocks directly underneath these blocks are numbered so that the last two numbers are the same. The lowest numbered block is 3,102 at Windsor, Ont. The express companies proposed to adopt this same blocking for the rates between points in Canada.

Main Blocks.—Each block measures one-half degree each way and the constant dimension is therefore the north and south length, roughly 34½ miles on the meridian. The width is approximately 23 miles at the 49th parallel.

Sub-blocks.—Each main block is sub-divided into four sub-blocks by lines intersecting at right angles at the centre. These blocks are lettered A, B, C and D.

Method of Stating Rates.

(*a*) *Between Sub-blocks in One Main Block.*—The appropriate rate between any two sub-blocks is arrived at by following the line of railway and counting each sub-block as 15 miles north and south and 12½ miles east or west.

(*b*) *Between Sub-blocks and Adjacent Main Blocks.* The rates from a point in any main block to a point in each of the three adjacent main blocks, in any direction, are made in somewhat the same way as the rates between two sub-blocks, that is, the sub-block in which point of origin is located is taken as the basing block, and the line of railway is followed from point of origin to final destination, counting 12½ miles east or west and 15 miles north or south.

(*c*) *Between Main Blocks.*—The rates between any two main blocks, that is a block at destination being more than three from block of origin in any direction are made by establishing a base point in block of origin and block of destination as near the centre as may be practicable, preference being given to large commercial or distributing towns and points which are common to two or more express companies. The distance between these two points following the line of railway is then determined and the rates as appearing in the mileage scale applied. These rates would therefore apply from all points in block of origin to all ponts in block of destination, although the actual mileage between some points would be less or higher than between base points.

Directory of Express Stations

Joint Directory of Express Stations.—As part of the block system tariffs, the express companies provided this directory for the Dominion of Canada, which shows in alphabetical order, by province and town, each station together with express company or companies serving it, and also the main block numbers and sub-block letters, to be used in determining its location and the rates to apply. In this way each main block will have one tariff naming rates from all points in that block to all points in the Dominion of Canada, giving the agent a quick and simple method of determining rates.

Graduated Charges for Less than 100 Pounds.—The present graduated table carried head line or rates per 100 pounds having a spread of 10c. from the 40c. to the 60c. rate; and 15c. from the 60c. to the 90c. The 90c. to $1.00 is only 10c., while all those over $1.00 were subject to a uniform spread of 25c. For example: The first head line or rate per 100 pounds is 40c., the next 50c., the next 60c.—or a spread of 10c. between each. This is followed by 75c. and 90c., or spreads of 15c. Then $1.00, after which the 25c. spread occurs uniformly starting with $1.25.

The application of the express companies proposed to make a uniform spread between each headline or rate per 100 pounds of 10c. Owing to the establishment by the Board in the judgment of different rates where delivery service

s not performed, multiples of 5 had to be introduced, so the graduated table as ordered is the same as that applied for by the express companies except that multiples of 5 have been inserted in the headline rates, and appropriate graduated charges named thereunder. Further explanation will be found under "Delivery Limits."

At the present time the graduated table begins at 1 pound and advances by 1 pound up to 10 pounds, after which it advances by 5 pounds. The scale as applied for by the express companies and ordered by the Board advances by 1 pound up to 15 pounds, after which it advances by 5 pounds. There is also quite a revision in the scale of charges. The effect of this revision is to actually make some reduction in shipments weighing between 10 and 50 pounds. (See page 162 of Judgment.) The minimum charge is, however, advanced from 25c. to 30c. per shipment.

Free Delivery Limits

At the present time the express companies collect and deliver shipments free of charge at a number of points throughout the Dominion of Canada, or in other words, the rates from point of origin to point of destination include both collection and delivery service.

A great many complaints have been made in the past few years dealing not only with free delivery area and the fact that it did not include certain districts, particularly in large centres, but also to the fact that the express companies did not maintain the service at a great many points although the rates charged were the same as between points where the service was given. This question was considered to a certain extent by the Interstate Commerce Commission in the United States at the time they ordered into effect the block system of tariffs and rates in that country, but they could not come to any definite conclusion as to what should be done, and to-day they handle the situation the same as the express companies in Canada.

The judgment of the Board deals very fully with this question (pages 171 to 179), and the Chief Commissioner has decided that some thing can be done to prevent the apparent discrimination as between cities getting the service and cities not receiving service. He accordingly ordered that where no waggon service is given, that is collection at point of origin or delivery at destination, the rate per 100 pounds shall be reduced by 30c., and where only one of the services is given, either collection at point of origin or delivery at destination, 15c. must be deducted from the rates per 100 pounds. For example, take where no service is given and the rate between point of origin and point of destination including service is $1.10, the rate without the service would be 80c., and where only one service is given the rate would be 95c. Shipments of less than 100 pounds to take the appropriate graduate rate as appearing under the reduced headline rate.

The express companies also made an application to the Board for the establishment of a uniform basis for determining the free delivery of collection areas at different points, along the lines of dividing the city or town into one-quarter mile squares and determining the free delivery area by the number of population for each quarter mile square. The Board gave this matter very careful consideration and ordered the basis in effect. (See page 177 of Judgment.)

The following will explain this matter clearly:

1. The corporate area shall be mapped into four parts by lines intersecting at right angles at a centrally located point, and based on these lines each such part shall be divided into squares measuring one-quarter mile each way, hereinafter called "blocks."

2. The minimum qualification for free cartage shall be four adjoining blocks, each containing at least 100 families in places with a population of 5,000 or over, and 50 families in places with a population of less than 5,000; except that in places with a population less than 1,000, free cartage may be provided in the discretion of the company. Industrial plants and business houses shall be initially reckoned as one family of five (or less) regularly employed persons, and each additional five as one family more.

3. From said four primary blocks each successive block conforming to the requirements of rule (2) shall be included in the free cartage area.

4. Any block not conforming to the minimum requirements of Rule (2) but which is bounded on three sides by cartage blocks, or through which express vehicles necessarily pass, shall be included in the free cartage area.

5. Four or more contiguous blocks conforming to the requirements of Rule (2), but separated from the free cartage area hereinbefore defined by not more than one-quarter mile (air mileage) shall receive the free cartage service.

6. Industries, or business or public institutions, in non-cartage blocks shall receive the free cartage service, provided they are not more than one-quarter mile from the nearest cartage block, and the intervening area shall also be so served.

7. A detour of more than one-quarter mile outside the free cartage area, in order to use an intervening bridge or vehicular ferry, is not hereby required.

8. Free cartage is not required by these rules beyond the corporate limits, nor within such limits where or when the roads are not reasonably passable by express vehicles.

9. The boundaries of the free cartage area shall be defined by thoroughfares or topographical features nearest or most convenient to the farthest lines produced by these rules.

Free cartage shall also be extended to a thoroughfare beyond but bordering the cartage limit, provided that at least 75 per cent. of its lots within a block are occupied, and that convenient cross connections exist; such thoroughfare to become the provisional limit with respect to the next thoroughfare beyond but adjacent to it that complies with the said minimum requirement; and so on until a complete block is formed under Rules (1) and (2).

A description of the local free cartage limits shall be posted in the express office at each cartage point and filed with the Board.

10. Should the traffic at any cartage point be so limited as in the judgment of the company not to warrant the expense of furnishing its own vehicles, an independent agency shall be employed by the company at its own expense, and shall be used until and unless the company is able to show to the satisfaction of the Board of Railway Commissioners that the price demanded for such service is unreasonable.

Joint Freight Rates

Board Orders Basis of Joint Freight Rates in Eastern Canada by Judgment and Order No. 28618, dated Ottawa, August 1st, 1919

The question of establishing a basis for joint rates to apply on shipments moving between points on one railway to points on another, has been under consideration for a number of years.

At the present time there are joint rates in effect between the C.P.R. and the Michigan Central, Pere Marquette, Chatham, Wallaceburg & Lake Erie, Wabash, and T.H. & B. The G.T.R. have similar joint rates with these lines. There are also joint rates in effect between the C.P.R. and G.T.R. on the one hand and the portions of the Canadian National Railways, formerly known as the "Central Ontario," the "I.B. & O." and the "Bay of Quinte" on the other. There are also several other joint rates arrangements between the larger systems, the C.P.R. and G.T.R., and various small roads. This leaves joint movements between the C.P.R. and G.T.R. and other portions of the Canadian National Railways, particularly between Montreal and Windsor, without any basis for joint rates.

As has been stated, the question has been under consideration for a number of years. The G.T.R. and C.P.R. endeavored to meet the situation and filed with the Board of

Railway Commissioners, effective May 1st, 1918, tariffs naming joint mileage class rates to cover such movements. Objection was raised to this tariff on the grounds that the rates so named were too high and really made advances over the existing joint through and combination of local rates. The basis for this tariff was the standard mileage rate plus 4c. per 100 pounds first-class up to 110 miles, 2c. 110 to 120 miles, with no addition beyond this distance. To this was of course added the 15 per cent. as allowed in the "15 per cent. advance" case.

The new Order and Judgment of the Board establishes a basis for joint rates within the territory bounded roughly by Windsor, Sarnia, Lake Huron, Georgian Bay, Sudbury on the west, and on the north by and including the C.P.R. Sudbury to Mattawa and the Ottawa River, and on the east by Quebec and Megantic. This is roughly the territory covered by the Internationl Rates Case Order 3258, dated July 6th, 1907, as amended.

The rates to be used are those shown in what is known as "Schedule A" (a scale of mileage class rates forming part of the Order in the International Rates Case) plus the following amounts in cents per 100 pounds:

1	2	3	4	5 to 10
8	7	6	4	2½

The mileage scale referred to is that now in effect for a one-line haul on the C.P.R. and the G.T.R., except in a few cases where maximum rates have been established from Windsor, Buffalo and Hamilton. The addition of the amounts just mentioned is stated by the Board to cover an additional charge for cost of transfer from one line to another as well as a certain amount for a two-line haul. The order requires that the railway companies shall prepare tariffs naming rates from point to point. They must also consider the various provisions as to grouping and the maximum rates between certain points as outlined in the International Joint Freight Rates.

Rates Case Order

In connection with the point of interchange the Board have specified the junction points at which such transfer, from one line to another, shall take place, the points named being as follows: Lennoxville, Actonvale, St. Rosalie, Montreal, Ottawa, Renfrew, Brockville, Kingston, Peterborough, Toronto, Orillia, North Bay, Essa (Utopia), Inglewood, Milton, Guelph, Tillsonburg, Woodstock, London, Mount Forest. All shipments moving under these rates are to be subject to a minimum charge of the first-class rate per 100 pounds point of origin to destination, but not less than 75 cents.

It would be rather difficult to prepare a comparison of rates which would be of interest to all members and show the rates which would be put into effect in accordance with the order. However, there is no doubt that this new basis will make a reduction in a great many cases from the present arrangement. It might be pointed out that the judgment of the Board shows a comparison for specified distances as between the rates which would apply under the Order of the Board and those which were proposed by the G.T.R. and the C.P.R. in the tariffs which they submitted to the Board to take effect May 1st, 1918. This comparison shows that the rates now ordered are considerably lower than those proposed by the carriers. The Order requires that the tariffs naming the rates shall be filed with the Board to become effective not later than October 1st, 1919. As the rates shown therein will be reductions from those now in effect, the carriers will not be required to give more than 3 days' notice as provided by the "Railway Act."

Further announcement will be made as soon as the tariffs come to hand.

In connection with this question it is interesting to note that the Railway Act has recently been amended, making it mandatory rather than permissive, that the carriers establish joint rates. Section 336 formerly read that the carriers "may" establish joints rates, and this has been changed to read "shall" establish joint rates.

It will be noted that there is no junction point provided in the Board's order for traffic moving between the C.P.R. and the G.T.R. on the one hand, and the Canadian National Railways on the other, between Toronto and Montreal. It is our understanding, however, that arrangements will be made for applying the basis named in the order between these lines at junction points such as Napanee, Bonarlaw, Trenton. This refers particularly to movements between local points on the Canadian Pacific Railway, such as Peterborough, and points on the Central Ontario Railway such as Picton.

Cartage Charges

New Schedule which Became Effective at Cartage Points on September 4th

For the information of our members we show herewith a complete list of the "Cartage Points" where the railway companies' cartage agents maintain such service, together with the old and new charges and list of "Exceptions."

	carloads.		Less carloads.		Smalls—Minimum charge in cents for any one consignment			
					300 lbs. and under.		Over 300 lbs.	
	Cents per 100 lbs.							
	New.	Old.	New.	Old.	New.	Old.	New.	Old.
Montreal, Que., GT, CN, CP. Atwater, Que., C.P. Hochelaga, Que., CP. Mile End, Que., CP. St. Henry, Que., CP.	5	4½	7	6	30	25	40	3
Toronto, Ont., GT, CN, CP.. Don, Ont., GT, CP North Toronto, Ont., CP. Parkdale, Ont., GT, CP. West Toronto, Ont., GT, CP	4	3¾	6	5	30	25	40	3
Guelph, Ont., GT, CP. Ottawa, Ont., GT, CN, CP. St. Hyacinthe, Que., GT, CN, CP. Three Rivers, Que., CP.	4	3½	5	4	30	25	40	3
Bothwell, Ont., CP. Chatham, Ont., GT, CP. Glencoe, Ont., CP. St. Thomas, Ont., GT, CP. Sarnia, Ont., GT. Thamesville, Ont., CP. Tilbury, Ont., CP.	3½	3½	4	4	25	25	35	3
Brantford, Ont., GT, TH & B Hamilton, Ont., GT, CP, TH & B. St. Catharines, Ont., GT, CN	3½	3½	5	4	30	25	40	3
London, Ont., GT, CP.	3½	3½	4	4	30	25	40	3
Windsor, Ont., GT, CP. Walkerville, Ont., GT.	3½	3½	5	4	35	25	50	3
Valleyfield, Que., GT.	3½	3½	4	4	25	25	25	2

CN—Canadian National Railways.
CP—Canadian Pacific Railway.
GT—Grand Trunk Railway.
TH & B—Toronto, Hamilton and Buffalo Railway.

Cartage charges will be collected on the basis of actua weight subject to the minimum provided in the Canadia Freight Classification.

These charges apply on freight rated 1st, 2nd, 3rd, 4t and 5th class in Canadian Freight Classification No. 16, sup plements thereto or reissues thereof, except articles show under the heading of "Exceptions."

Cartage charges shown herein will not apply on,—

Freight carried under Canadian Freight Classificatio classified lower than 5th class.

Freight carried under other classifications which may classify therein 5th class or higher, but which is lower than 5th class in Canadian Freight Classification.

Freight weighing 2,000 lbs. or over, per piece or package.

Freight in bulk, carloads, classifying 5th class or higher.

Freight for private house delivery.

Acid in Carboys or Demijohns.
Agricultural Implements.
Ash Sifters.
Baby Carriages.
Bakers' Ovens.
Bananas, not crated.
Bar and Shop Fittings and Furniture.
Baskets.
Baths.
Boats.
Bone Black, in bags.
*Broom Stock.
Brooms (straight shipments).
Cereals (straight shipments).
Churns.
Cork.
*Conductor Pipes.
Cream Separators.
*Culverts.
Doors, Windows.
Door and Window Sashes and Frames, including Skylights and Ventilators, Metal or Wooden.
Dressed Meats (except hogs), unless properly canvassed or otherwise protected.
*Dry Hides.
*Eave Troughing.
Elevators (and parts thereof).
Empty packages or containers, new or old: except when K.D. Flat, whether loose, nested, jacketed, in crates, or boxes, or otherwise, including Caskets and Coffins.
Excelsior.
Feathers.
*Flax Fibre.
Furnaces (and parts thereof).
Furniture, Sewing Machines and Billiard Tables, including Clothes Lockers, Metal or Wooden.
*Garden Utensils.
Glass in Packages, exceeding five (5) feet in height or length.
Globes, Glass and Electric.
Hats.
Household Goods and Settlers' Effects.
*Ice Cream Cones.
Iron and Steel Products exceeding twenty (20) feet in length.
*Iron Farm Gates.
Joiner's Work, Loose Lumber and Ladders.
Lamp Black, in bags.
*Lamp Chimneys.
Leather, Loose.
Machines and Machinery (all kinds).
Marble and Slate Slabs.
Organs, Pianos and Musical Instruments and parts thereof.
*Picture and Mirror Frames and Mouldings.
*Popped Corn Confectionery.
Portable Buildings.
Rags, Bones, Scrap Metal, Scrap Paper and Scrap Rubber, in bags or uncompressed bales.
Safes and Vault Doors.
Screen Doors and Window Screens.
Show Cases.
Signs, not boxed or exceeding (5) five feet in height or length.
*Stove Pipes and Elbows.
Stoves (and parts thereof).
Trunks (empty or full).
Vehicles, Automobiles, Bicycles, Motor Cycles (and parts thereof, including Tires).
Wadding (Cotton).
Washing Machines.
*Willow Reeds.
*Woodenware.
Wool, Hair, Shoddy and Wool Stock, Mill or Cotton Sweepings.

*Added, effective September 4th.

Freight Men Shifted

Changes Consequent Upon Resignation of Guy Tombs from Canadian National Railways

In a circular issued by Mr. George Stephen, Freight Traffic Manager of the Canadian National Railways, the promotion of Mr. A. T. Weldon, to the position of Assistant Freight Traffic Manager at Montreal, with jurisdiction over all lines east of Port Arthur and Armstrong, Ont., is announced. Mr. Weldon previously held the position of Assistant Freight Traffic Manager at Moncton, N.B., with jurisdiction over the lines of the Canadian National Railways in the Maritime Provinces only. Mr. Weldon will be succeeded at Moncton, N.B., by Mr. M. F. Tompkins, who will have jurisdiction in freight traffic matters over the lines of the Canadian National Railways east of Matapedia, Que., and Edmundston, N.B., with the title of General Freight Agent. These changes are consequent on the resignation of Mr. Guy Tombs, formerly Assistant Freight Traffic Manager at Montreal, who left the railway field to engage in commercial work.

The branch factory in Galt of the Williams, Greene & Rowe Co., shirt manufacturers, Kitchener, which was opened on August 11th, in the Kerr Block, is reported to be doing well, and fifty machines are in operation. It is stated that no difficulty is being experienced in getting help.

Will Manufacture Buttons

International Button Co., a New Enterprise, Will Locate Plant in Arnprior

According to an announcement appearing in the Arnprior *Chronicle*, the International Button Co., Limited, will establish a factory in that town. Negotiations have been in progress for some time between the local Board of Trade and Messrs. W. C. Thompson and H. C. Bellew, of Montreal, president and secretary respectively of the company.

The International Button Company, Limited, are a newly incorporated organization. Mr. Thompson has had a great deal of experience in the manufacture of buttons in the Old Land and in the United States, and he came to Canada at the suggestion of the Canadian Government to enquire into the possibility of this and other industries that have been largely confined to Germany and Austria. They have had the latest improved machinery built for them and they are prepared at once to begin manufacturing. Their purpose is to erect a factory to employ 200 hands, but they have already marketed their entire output for two years, and as it will delay matters to wait for the construction of a new factory, they will probably lease the old clothes pin factory and premises for the present, renovating and enlarging it.

At the commencement the company will employ at least fifty hands, with a weekly payroll of $500; this they expect to double within six months.

The raw product used is vegetable ivory, and this will be brought from South America in shipload lots.

An Important Incorporation

An Eight Million Dollar Corporation to Develop Iron Ore Deposits has been Formed

A charter for $8,000,000 was issued on August 13, to the Consolidated Iron & Steel Corporation, Limited, a company of Detroit and Toronto parties engaged in the mining business. The company is essential Canadian, with head offices at 20 King Street East, Toronto. They own two large deposits of proven iron ore lands and it is their intention to proceed in a large way with their development.

The company has opened a large hematite mine on the C.N.R. in the County of Leeds, 25 miles north of Brockville at Furnace Falls, where they have 1,500 acres. The early settlers erected a smelter at this place 110 years ago and it was operated in a primitive way the ore being ground out by water wheel. It still retains the name given to the place at that time. This was in the days when Lake Superior and Pennsylvania ores were almost unknown. The City of Brockville has offered inducements to the company to build a pig iron smelter there, and it is being seriously considered as there is a surplus of electric energy at a low rate. As the mine has excellent transportation facilities, ore can be shipped by the St. Lawrence, either west to Canadian and United States markets or east to Montreal, Ottawa, and European markets.

Their other property consisting of 2,500 acres is located at mileage 182 on the Algoma Central Railway. This has been gradually developed since it was discovered in May, 1911. Up to the present time permanent camps have been built and diamond drilling has been carried on from November, 1917. to July, 1918, proving up large deposits of ore to a depth of 500 feet. Prominent iron ore engineers reporting on this property estimate the tonnage at from 800,000,000 to one billion tons of ore. The ore is free from titanium and low in phosphorus and sulphur. Work on both properties is now being carried on, thousands of tons already being piled up at the Furnace Falls mine ready for shipment.

The Plumb Plan of Railroad Administration

Scheme of Ownership and Operation which is Now Receiving a Great Deal of Attention in the United States—Practically Places Control of the Railroads in the Hands of Those who are Deriving their Livelihood from Railway Operation

By HON. ATLEE POMERENE

Member of United States Senate

IN the United States at the present time a great deal of attention is being directed to what is termed the Plumb plan of railroad re-organization and administration. The plan is proposed by the Railroad Brotherhoods and has the support of the American Federation of Labor. Under its terms the Government of the United States would acquire the railroads and hand over the control and operation to what has been termed a "Tripartite Board," the members of which would be selected as follows—one-third by the President of the United States, one-third by the railroad operatives in the official class. and one-third by the railroad employees below the official rank. In other words, two-thirds of the Board members would represent those who were on the railroad payrolls, while one-third would presumably represent the general public.

Valued at Twenty Billions

A criticism of the Plumb plan has been made by Senator Pomerene, which brings to light several of its weak points. The Senator replies to a letter received from one of the railroad brotherhoods in which he is asked to state whether he is for or against the plan. In the course of his reply, Hon. Mr. Pomerene says:

"The railroads of this country, in round numbers, are valued at $20,000,000.000. They are the web and woof of America's industrial, commercial and social life. Under the Plumb plan it is proposed to take this property by purchase or condemnation from its stockholders, among whom are thousands, not to say millions, of the plain people of the country—old and young, the widows and the orphans—and to pay for them in cash payments or by the issuance to such owners of United States Government bonds. In other words, they shall be paid for by the people's cash or by their obligations. They are then to be managed and operated by the national railway operating corporation for 100 years, which shall have a board of directors to be composed of fifteen men, five of whom shall be selected by the classified employees of the railways, five by their official employees, and five to be appointed by the President, not more than three of them to belong to one political party.

"Suffice it to say that you and I both understand—even if we are not willing to admit it—that the ten railway directors will have interests which will be at variance with the interests of the traveling and shipping public, who pay the bill; and while the other five appointed by the President are said to represent the public, which perhaps embraces about 100,000,000 people—I mean the people other than those who will be directly or indirectly interested either as the classified and official railway employees or their families —they will owe their appointment to a political power and, it is my judgment, may be influenced by the political purposes of the party in control of the Government.

"Are you quite sure that when the Plumb plan was devised it was in the interest of 'the masses?' If so, how does it happen that the bill is presented by the brotherhoods alone and their associates? Why were not the interests of the general public consulted?

"In the history of railroad economics do you know of any country anywhere under which any plan akin to the Plumb plan has been adopted; Are you quite sure that it is fundamentally sound to require the Government of the United States to invest $20,000,000,000—about one-twelfth of the total wealth of the country—in this enterprise and turn it over to the operatives for 100 years?

"If the Plumb plan is sound economically and is for the interests of 'the masses,' why do you not suggest that similar legislation be adopted whereby all public utilities, including water works, electric-light plants, gas and heating plants, be purchased and turned over to their employees and operatives, respectively?

"If it is sound and in the interest of *the masses*, why do you not suggest that all the coal mines, iron and copper mines, be purchased by the Government and turned over to the operatives in the same way?

"Why do you not suggest that all the manufacturing and industrial plants of the country be purchased with Government funds or by the issuance of Government bonds and turned over to their operatives in the same way?

"Why do you not advise that all the stores be purchased and turned over to their operatives in the same way?

"Why do you not recommend that all the banks of the country be acquired by the Government and turned over to their operatives?

"Why do you not ask, in the interest of 'the masses,' that the Government purchase all the farms of the country and turn them over to the employees on the farms?

"And, lastly, may I suggest that if one man should happen to own two houses, one of which he rents, why do you not ask that the second house shall be bought by the Government and turned over to the renter?

"Where is this going to end?

"My friends, permit me to say the Plumb plan has nothing akin to it outside Bolshevik Russia.

"It is worse than socialism.

Ownership for a Class

"Socialism contemplates the public ownership of property to be controlled and operated by the public for the public. The Plumb plan contemplates the public ownership of the railroads for a class. As already stated, they are to be taken over by purchase or condemnation, and paid for with the cash or bonds of the whole people and then turned over to the national railway operating corporation, whose board of directors shall consist of fifteen men, ten of whom shall be railroad classified and official employees. As neither class of these employees will have any stock, their interests will be one and the same as against the public. In other words, $20,000,000,000 worth of property bought by money belonging to 110,000,000 people is to be turned over to 2,000,000 railroad men, representing, perhaps, including their families, 10,000,000.

"Does this seem to be for the benefit of 'the masses?'

"Mr. Plumb in his testimony before the Senate Committee on Interstate Commerce in February, assumed that the capi-

tal invested amounted to $18,000,000,000 approximately. In his testimony last week before the Interstate Commerce Committee of the House, he estimated that all the present owners would get for their property is $13,000,000,000. So, according to his own testimony, Mr. Plumb's plan, if enacted into law, will substantially confiscate $5,000,000,000 worth of property belonging to private owners.

"And how is he to pay for this property even at this reduced value?

"He tells the public that he will, by his plan, save to the shippers of the country a large expense, in that these bonds can be sold for 4 per cent.

"The railroads earned during the three years of Government control 5.21 per cent. He does not say who is to buy this perhaps $18,000,000,000 or $20,000,000,000 worth of bonds. He has not named the purchasers.

"May I not remind you that during the last Victory loan, by the best organized, nation-wide campaign conducted by all the patriotic men, women, and children of the country, we sold less than seven billions of bonds at 4¾ per cent. And if, when all the patriotism of the country was back of this campaign, it was so difficult to sell these bonds at par for 4¾ per cent., will Mr. Plumb rise up and tell us where he is going to sell $20,000,000,000 worth of bonds—probably the real value of the roads—at 4 per cent.?

"Ought you not to tell me how you are going to sell these bonds when you ask me to support this proposed legislation?

"Does it not occur to you, when not only the whole nation, but the whole world is disturbed, industrially, economically, and financially, that we had better wait until normal conditions are restored before beginning a scheme so revolutionary as that proposed in the Plumb plan, even if it were sound?

"And what would be the result if it fails?

Should Be More Consistent

"Invoking the principle of brotherhood—a name I love—do you not feel you ought to be consistent, and while asking for this investment of the public funds for your benefit to likewise ask for the benefit of a proportionally equal amount of Government funds for every other business enterprise in the United States, and turn that over to the employees of those several enterprises?

"Does not the principle of fraternity suggest this?

"And by the time we get through with it there will be $240,000,000,000 of Government bonds issued and on the market.

"My friends, this Plumb plan spells ruin for beloved America.

"In the past few years a good many people have urged Federal ownership and control of the railroads, the telegraphs, and the telephones. In view of recent experiences most of them who have had no selfish purpose to serve have changed their views.

"Government control of these utilities has been so complete that it does not differ materially from actual Government ownership, and there is no such radical difference between the present Government control and operation and that provided for in the Plumb plan as to warrant anyone in saying that while the former has been a failure the latter will be a success.

"From the standpoint of operation every user of the railroads, telegraphs, and telephones knows that the service has been worse than during the private control, excepting only the condition of the railroads during the last two months of private control, which was due to war conditions.

"And let me say a word concerning Government control of railroads from a financial standpoint.

"You will remember that the increases in wages during the year 1918 were made retroactive, dating from January 1, 1918.

"Freight rates were advanced 25 per cent., and passenger rates much more, the increase to take effect as of July 1, 1918. Director General McAdoo, in his testimony before the Committee on Interstate Commerce, said to us that if the increase in rates had been for the entire year there would have been a 'substantial surplus for the year of at least $100,000,000 to the Government.' And he added, 'For the year 1919, with all wage increases granted in 1918 operating for the entire twelve months, and upon the assumption that the traffic of 1919 is substantially the same as in 1918 and that the cost of fuel and supply remain the same, it is estimated that there should be a surplus to the Government over and above the standard return of approximately $100,000,000.

"As I now recall, Director General Hines gave substantially the same assurances early in January of this year.

Losing Millions a Month

"But what was the result? Senator Cummins, chairman of the Interstate Commerce Committee, speaking in the Senate on August 5, said, 'We lost $240,000,000 last year, and we lost in the first four or five months in this year, 1919, $260,000,000 and we are now losing at the rate of $39,000,000 a month.'

"Do you really believe that under the Plumb plan you can turn this deficit under Government control either into a surplus for the account of the Government or the public or into better service for the country?

"I do not believe it can be done except by one increase after another in transportation rates.

"Permit me to make another suggestion: Since Government control was begun, the wages to the employees have been increased about $1,000,000,000. The Director-General, on July 31, 1919, informed the President that additional increases were demanded, which would aggregate, if granted, about $800,000,000 more per year.

"I have no knowledge as to whether the conditions are such as to justify this increase or not, and I express no opinion with regard to it. I want the railroad men and all laboring men to be liberally paid, whether under public or private control.

"But this is only an incident to the larger question to which I want to call your attention. If the conditions are such that this increase is justified, then I am for it. I await the proof before I shall decide it.

Should Not Insinuate Revolution

"But when your representatives come to Washington and not only ask this increase but demand that the Congress of the United States shall buy these properties at a cost to the Government of $18,000,000,000 or $20,000,000,000 and turn them over to the national railways operating corporation for management and operation, I want to say to you as one American to another, it is neither fair nor American, for them to insinuate revolution, as they have before the Interstate Commerce Committee of the House, unless their demands are granted.

"And let me suggest that the people at large have not expressed any desire for this plan, but members of your brotherhoods—I do not mean the chiefs—have been in Washington making their threats as to what would happen unless this legislation is enacted. As one Senator I shall always be open to conviction, but I never yet have yielded to a threat, and I never will.

"Of course, I know that you do not approve these methods. Law-abiding citizens, real Americans, never do approve them. It is only men of the Bolshevik type of mind that ever resort to them.

"Among the threats that have been made are threats of a nation-wide strike. I do not mean to suggest that the chiefs

Canadian Catalogues Wanted

The Public Library of New South Wales are making an effort to secure as complete a collection as possible of the latest information concerning trade, industries and manufactures of all countries, especially those included in the British Empire. They have procured from manufacturers and trading associations throughout Australia, Great Britain, United States of America and other countries, a fine collection of trade catalogues and similar publications. At present, however, Canadian manufacturers are not sufficiently well represented.

It would be well worth while for Canadian manufacturers to send their catalogues.

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of the brotherhoods have suggested a nation-wide strike, but some of the members of the brotherhoods have made these threats here in Washington to Senators. I am sure that you do not give any countenance to strikes under present conditions.

"I believe in the right of the laboring man to use the instrument of the strike under proper circumstances, but I do not believe the occasion is here or ever has been here or ever will be here which will justify a nation-wide strike, with all the distress it will bring, not only on the public at large but on the strikers and their families.

"With a general strike on in this country, tying up all the railroads, the products of the mine and the farm and the factory could not be moved to the centres of population and in one week's time the people of our great cities would be starved, and in winter frozen. The people of these centres of population include the wives, the children, and the babes of railway men as well as others. It is too shocking a situation to even contemplate.

"A sub-committee of the Interstate Commerce Committee, of which I am a member, has been engaged for a number of weeks in preparing a bill providing for the reorganization and regulation of the railroads to present to the full committee for its consideration. I hope it will appeal to the sober sense of the public. I can give no assurances as to whether it will be approved or disapproved, but of this I am convinced, that the American public never will approve the Plumb plan or anything akin to it.

"The Plumb plan is the most vicious piece of legislation that has been presented to Congress since I have been in the Senate. I would feel that I was contributing to the ruin, not only to the transportation system of the country, but to its financial and industrial breakdown, if I voted for it. It would lead not only to the ruin of the whole people, but to every railroad man as well.

"Notwithstanding the statement in your letter to the effect that this plan was unanimously adopted at a meeting of the representatives and delegates to whom it was submitted by you, I venture the assertion that when they understand it the vast majority of them will oppose it.

"Much has been said by the brotherhood chiefs and their counsel in the last few days here in Washington about the democratization of industry, and the Plumb plan is referred to as the means of democratizing transportation. A careful study of the bill will show that it is not democracy in transportation for which it provides, but autocracy in transportation.

"Mr. Plumb the other day referred to the Wall Street control of the railroads. That was true in the past. It is not true now. Wall Street has many vicious things to its credit in years gone by, but the captains of finance have never demanded $20,000,000,000 of the American people's money at one time!

"The Plumb plan out-Harrimans Harriman in his palmiest days! The public does not want to be skinned, but if it must be skinned it will make little difference whether it is by Wall Street or by the methods provided for in the proposed Plumb plan.

Toronto Branch and the Fire Marshals' Convention

By H. MACDONALD
Secretary, Toronto Branch, C.M.A.

THE Fourteenth Annual Convention of the Fire Marshals' Association of North America, an organization which now has 26 members and 29 associates, practically all of the latter having been added during the past year with a view to widening the interest in the work, assembled in Toronto on August 26th for a four-day convention. Many of the States in the Union have no Fire Marshals, but in practically all there is some officer such as a Fire Commissioner, whose duties are similar.

In Canada, Ontario has a fire marshal, while the other provinces delegate the pursuit of arson, organization of prevention work, etc., to some other officer. This was the first time the Association had met in Canada.

The C.M.A. entertained the delegates at dinner on the evening of Wednesday, August 27th, at the Scarboro Golf and Country Club, Mr. W. C. Coulter, Chairman of the Toronto Branch, presided, and extended the best wishes of the manufacturers to the visitors.

Mr. J. S. McKinnon, First Vice-President of the C.M.A., delivered a stirring address on the "Interest of the C.M.A. in the Work of Fire Prevention," giving the gathering some interesting facts about the work performed by the Association's Insurance Committee.

Mr. H. W. Fleury, Chairman of the Insurance Committee of the C.M.A., referred to Canada's record in the matter of fire losses as shameful. There was a great deal of inertia which would have to be shaken off. He hoped that by the next time the convention met in Toronto, the record would be better. Mr. Arthur Hewitt, Chairman of the Ontario Fire Prevention League—in the organization of which the C.M.A. took an active interest, gave a short review of the activities of the League and invited co-operation and support.

Mr. T. A. Fleming, President of the Fire Marshal's Association, acknowledged the hospitality of the C.M.A., stating that the present was a serious time for both sections of the American continent, but that through it all, the present good fellowship must continue.

Toronto branch was represented by Messrs. W. C. Coulter, W. H. Shapley, T. A. Hollinrake, R. L. McIntyre, and H. Macdonald, Secretary.

The Question of Conservation

is of more importance to the country to-day than ever.

Do Manufacturers Realize

the necessity of better Fire Protection? Do they realize

What Fire Prevention Means?

Fires during 1918 in Industrial Plants numbered only 486 or 5% of the total number for the year; but these 486 fires caused a loss of $7,565,322 or 48% of the total Fire Waste of the Province.

CLEANLINESS, ORDER AND FORETHOUGHT

are important factors towards reducing this preventable waste.
Manufacturers should provide better and more systematic
Inspection and Watchman Service.

More efficient fire fighting equipment---Chemical Fire Extinguishers and Automatic Sprinklers. In 15,000 fires, tabulated by the N. F. P. A., Boston, where Automatic Sprinklers were installed, 85% were put out by one Sprinkler Head.



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Appointed to Australia

James N. Mackin, who during the war represented E. C. Atkins & Co., Indianapolis, Ind., and Hamilton, Canada, manufacturers of the Atkins silver steel saws, in Washington, D.C., has been selected to represent the company in Australia. He is now superintendent of the entire Australian Division, with headquarters at the E. C. Atkins & Co. Branch House, 5 Australasia Chambers, Martin Place, Sydney, N. S. W., Australia. Mr. Mackin's thorough knowledge of every detail concerning saws, as well as his wide experience in selling and his pleasing personality, make him a man eminently fitted for this important position. He has many friends throughout the country who will be pleased to hear of his further success.



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Available labor includes: Skilled mechanics, skilled wood workers and ample female help; labor 99% British; 75% home owners; living conditions unsurpassed and no strikes in Stratford for 15 years. 6 lines of the Grand Trunk serve the City; shipping facilities are unexcelled; Hydro Electric Power available and water supply unlimited.

Manufacturers or wholesalers wishing further particulars and prices of the above properties are requested to communicate with Stratford Chamber of Commerce

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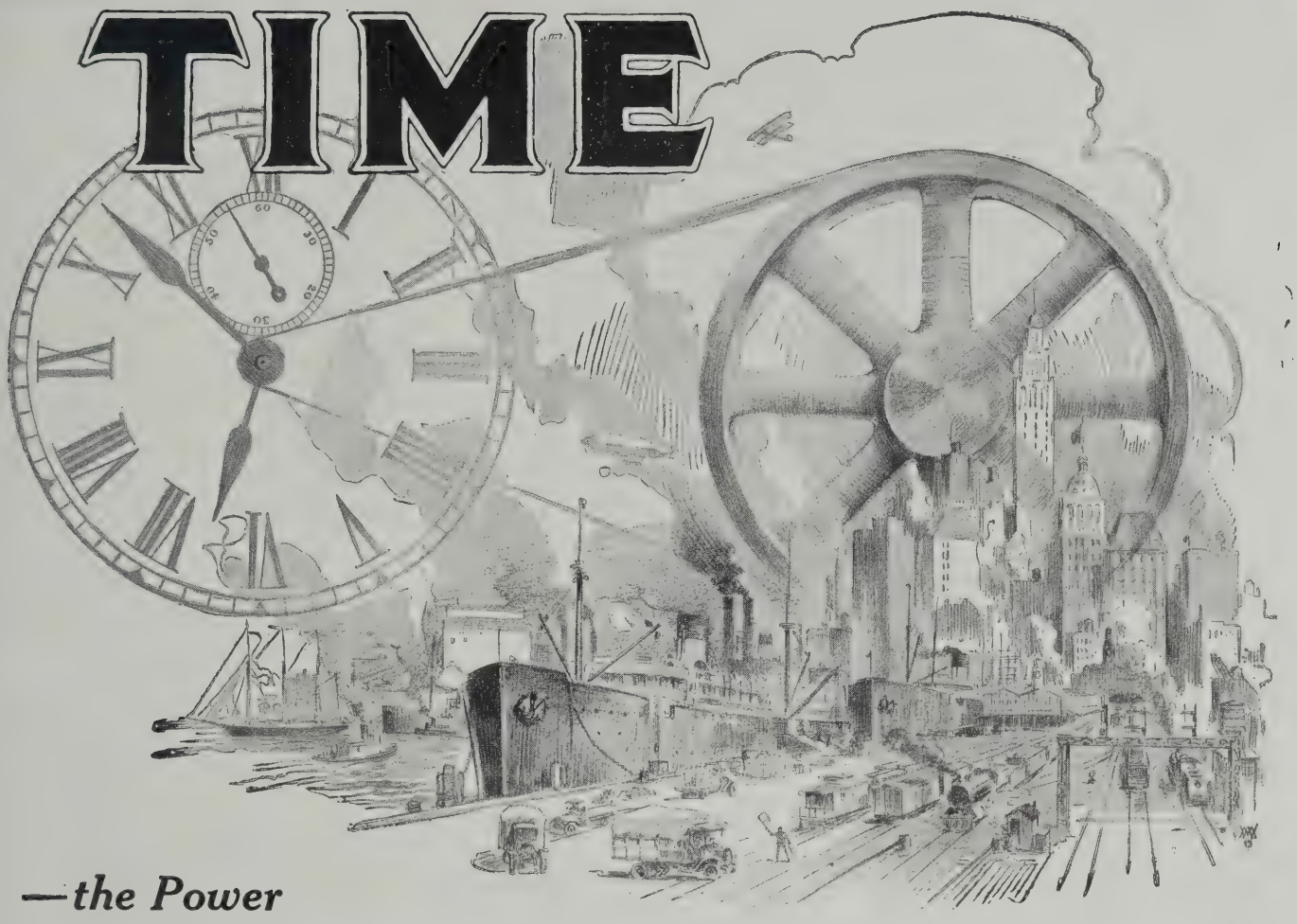
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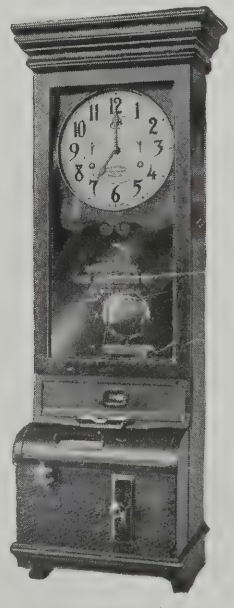
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Your filing clerk is not responsible for the way your filing system works; it's not her fault if it's *fundamentally* wrong. And you certainly can't blame her if she holds you up for that "wanted-in-a-hurry" paper—to close some important point in a discussion—to get some needed information.

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OFFICE AND FINANCE

Some Aspects of Foreign Exchange

By GEORGE E. ROBERTS
Vice-President, National City Bank of New York

(From the "Nation's Business")

FOREIGN exchange has always been considered a subject of great obscurity to the layman, and in fact it has many complexities, but the main principles are simple enough.

If a country imports more than it exports, evidently it must settle the difference. The methods of settlement are substantially the same as in case of an individual who buys more than he sells, to wit: by payment of cash, a use of credit which postpones payment, or by the transfer of securities representing property of some kind.

In normal times trade naturally keeps fairly well in balance, a country's outgoing products approximately settling for the products and services which it obtains of others. We see this principle illustrated within our own country in the relations of particular sections to the whole country. The products of a state flow out to the general markets and settle for the goods which that state buys outside, and for various services, such as transportation, insurance, loans, etc. In some cases, as when a state's production is mainly of one crop, the payments will run heavily one way at one season of the year, when the state will accumulate either cash in its own banks or credit balances in the banks of financial centres outside; and then during the remainder of the year the payments will run adversely, compelling shipments of cash or a drawing down of outside balances, and possibly the negotiation of loans outside.

When Crop Failures Occur

If there should be a crop failure, cutting off the flow of products one way, the situation will be thrown seriously out of balance. In this event the state or locality will be obliged to use its credit to a greater extent than usual. The merchants will ask for credit where they are accustomed to buy, the local banks will borrow of their correspondent banks in the financial centres, real estate loans will be negotiated, collateral will be pledged, and securities will be sold, all for the purpose of tiding the community over an adverse trade balance.

Settlements between different sections of this country are now made largely through the Federal Reserve banks, and the system illustrates the usual process of settlements between countries. Drafts, checks, etc., representing claims for cash received within a given reserve district, first find their way to the reserve bank of that district; the reserve banks send them direct to each other, but report their claims on each other by wire daily to a clearing house maintained in Washington, where they are offset against each other. This clearing house keeps a book account with each reserve bank, crediting it with balances in its favor and debiting adverse balances. It has in its custody a stock of gold, amounting at this writing to about $524,000,000, deposited by the reserve banks for the purpose of covering the balances which may arise against them.

Originally, these deposits were actually segregated, and weekly settlements were made by the physical transfer of metal to balance the accounts, but of late the gold is all kept together, like the ordinary deposits of a bank and settlements are made simply by debit and credit entries. The efficacy of the system, however, depends finally on the authority which the Federal Reserve Board exercises to require the creditor banks to re-discount paper for the debtor banks whenever the latter's share of the gold fund runs low. The parity of domestic exchange is thus sustained at last by grants of credit between the Federal Reserve banks. The whole system is based upon the theory that in the long run the transactions will balance each other.

But What of Foreign Barter?

Arguing from the successful operation of this clearing system with its gold settlement fund, an international clearing system and gold settlement fund have been suggested. It would work all right, undoubtedly, so long as every country kept up a deposit of gold sufficient to cover its adverse balances, but when any country failed to do this the exchanges on it would slump, unless the creditor countries would come forward with loans.

It is obvious that there is more difficulty about managing an unbalanced situation in the international exchanges than in the domestic exchanges. Between different sections of the same country the money is the same, banking system the same, investments are mutually familiar, and all business relations are so close as to establish confidence and credit. Between this country and England the conditions have been quite favorable in the past because England has been a large investor in American securities, and had a familiarity with them which made it easy to pass large amounts of them back and forth in the balancing of trade differences. We, however, have never invested much in British securities, and comparatively few people in this country have any knowledge of them. Therefore, now that there is a heavy trade balance in our favor in our dealings with England, we are not as well prepared to handle the situation as England was when the balances ran the other way.

The Supremacy of London

London's long career as the clearing centre of the world's trade has been due to several important conditions:

Her maritime supremacy, with shipping lines communicating directly with all parts of the world.

Her capital investments in all parts of the world, creating credits for her everywhere, making London a world market for securities and familiarizing her bankers with credits everywhere.

The great free trading market for commodities of every kind, making it always possible to sell any kind of products there at a good price.

The free gold market, making a draft on London a preferred means of payment anywhere in the world.

Fluctuations in exchange rates are caused by the fluctuating state of trade. If trade is in balance, there is no factor in exchange rates but the simplest of banking service.

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HEAD OFFICE - TORONTO

It is merely book-keeping, the drafts drawn between countries cancelling each other in the accounts. But as soon as trade begins to get one-sided a new service is required and somebody must be paid for rendering it. A credit must be created by other means. If the balances are small and temporary or seasonal, the bankers of the debtor country will readily handle them. They first will draw down their foreign balances, and perhaps borrow to replenish them, and so far exchange charges will be light. If the adverse balances increase, exchange rates will rise and gold will begin to flow out. This gold will come out of bank reserves, and its loss will compel the banks to contract their loans. To hold the movement in check they raise the exchange charges, which become a serious tax on importation and tend to restore the equilibrium.

Changed Position of U.S.

The war has wrought a great change in the position of the United States in the exchanges. During the ten years preceding it the average annual trade balance in favor of the United States was approximately $500,000,000, and it was practically offset by interest and dividends paid to foreign holders of American bonds and stocks, charges of foreign shipping upon our imports, expenditures of American tourists abroad, remittances of foreign-born residents to the old countries, and other items for which we were indebted to Europe. Now we have bought back most of our securities and made loans to Europe upon which the interest coming to us will be $500,000,000 to $600,000,000 per year, with more in prospect.

This change from a debtor to a creditor position is certainly to our advantage, but the effects are very perplexing to some people, because they are not favorable to our export trade. Formerly we had to export about $500,000,000 per year to pay our accruing obligations. Europe simply gave us credit on the books; now she must send us something for it. She cannot pay us in gold, for the total annual production of gold in the world is not equal to that sum. She can pay us temporarily in securities, if we will take them, but of course that will increase the annnual balance in our favor.

How Can Our Customers Pay?

The normal tendency in trade is to find a state of equilibrium, but during the war this equilibrium has been violently disturbed, and the United States has run up enormous balances against Europe. These have been settled, first by the return of millions of securities, then by payments aggregating a billion dollars in gold, then by the borrowings of foreign governments of the United States Government and in the open market, aggregating $12,000,000,000. The net trade balance in favor of the United States against the rest of the world in the fiscal year just closed was a little above $3,700,000,000.

The moment we cease to grant credit to purchasers, exchange rates will rise rapidly against us. They have done so already. The pound sterling, worth in gold $4.86, is today worth less than $4.50, a discount of about 7 per cent.; the franc is at a discount of 40 per cent. as compared with the American dollar, and Italian exchange still lower. The effect of this is that residents of these countries in making purchases of American products must pay corresponding premiums to convert their money into American drafts. Even a resident of Canada must pay $103 to liquidate a debt of $100 in the United States.

In normal times trade cannot continue under such a handicap as this. Moreover, this discount on foreign currencies in relation to the dollar not only handicaps our exports but promotes the importation of foreign goods into this

country, because the American dollar has high purchasing power everywhere.

American business men must face this situation intelligently. They have been thinking only of selling more abroad. They will have to give up that ambition or recognize that in order to do so they must also take more of foreign products.

He is a poor merchant who never considers how his customers are going to pay for the goods he hopes to sell. It is well to understand while Congressional committees are making a search with a view to stopping up every crevice through which foreign goods percolate into this country that the effect of stopping them must be to also stop the outward flow of American goods.

Making Up Annual Statements

Greater Clearness and More Detail Should Feature Reports of Industrial Companies

(From Montreal "Journal of Commerce")

A legend circulates around St. James Street that once upon a time complaint was made to a prominent business man concerning the unusually scanty character of the information to shareholders published in the annual report of the corporation of which he was the head. "Well," replied the prominent business man, "what right have shareholders got to information anyway?"

This "public be damned" attitude is not exactly typical. But an extensive acquaintance with the financial statements issued by Canadian corporations to their shareholders, and published in the newspapers, suggests that the investor who buys the stock of these corporations in the open market has to make very much of a venture of faith, unless trade connections or technical knowledge give him the capacity to judge the real value of a particular stock, actual and prospective. In sober fact, the financial statements published by many limited liability companies are by no means intelligible to the great majority of shareholders or prospective investors, and in some cases there is an apparent intention to disclose as little information as possible.

Financial Statements Lack Detail

In part, at least, this condition of affairs is due to the well-known fact that many people, thoroughly successful in their own line of business activity, are children in business matters outside their own particular field. Unfamiliarity with accounting jargon, and incapacity to view financial statements intelligibly, are frequently enough found among those who may be to a certain extent accurately described as successful men of business. This lack of financial education accounts to a considerable extent, possibly, for the bonfires of rubbish frequently found to be necessary on the winding-up of even large estates.

On the other hand, an investor may be a past master in the mysteries of accountancy, but what is he to make of an entry like this—the sort of entry which appears in the financial statements of too many Canadian corporations:—

"Real estate, buildings, machinery and goodwill, $5,000,000."

This impressive looking entry tells the shareholder or prospective investor, in fact, nothing. Goodwill, that familiar and elusive asset, may be a small or a large proportion of the $5,000,000. Land, buildings and machinery may represent half a million dollars of the total, or two million dollars, or $4,999,999. Real estate may be taken in at a high valuation, or at one much below its real market value. Buildings

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Capital Paid Up..... $14,000,000
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and machinery may or may not be at a properly depreciated valuation. A compensating entry of "Depreciation Reserves" among liabilities may give the reader of the statement some inkling on this point, but no real information regarding the actual depreciated value of the company's assets. Frequently enough, too, that compensating entry is missing, depreciation, where it was written off at all, having been written off direct to profit and loss or surplus. In such case, it would be necessary to hunt up the financial statements of the concern for years past to obtain even a vague idea of what had been done in this connection.

Hopeless Search for Information

In any event, unless the value of the company's fixed assets is clearly and distinctly set forth in the balance sheet, an entry of "Depreciation Reserve" among liabilities or an allocation in the profit and loss account to that reserve, tells the shareholder or prospective investor nothing unless the basis of these depreciation allowances is also set out. The depreciation reserve may be hopelessly inadequate in view of the character of the assets, or largely excessive, so concealing profits and establishing a secret reserve, or merely normal. And when, as is sometimes known, the allocation to depreciation is joined up with repairs, taxes, pension fund, or half a dozen other items, in one preposterous total, the search for information on this point becomes utterly hopeless.

There is another entry among assets of a pretty common sort, which at the present time when many raw materials used in manufacturing processes have reached their zenith, and are at the beginning of a period of declining prices, is of much importance: "Inventories at cost or under." This may mean the greater part of the inventory at cost, with a merely nominal allowance for old or depreciated stock, or it may mean a substantial writing down from cost in anticipation of falling markets. Has the inventory basis been changed in comparison with the preceding year? Changes in the basis of inventories taken at the beginning and end of a company's financial year can make a considerable difference in apparent profits.

What Are "Net Profits?"

In regard to what constitutes profits, particularly "net profits," there is a vast divergence of practice, which cannot but be mystifying to the ordinary shareholder. It is a common practice to state the amount of "net profits" before taking into consideration interest on bonds, depreciation, etc., although it should be apparent that real "net profits" can only be arrived at after these charges have been met. A measure of uniformity in accounting practice in this matter is strongly desirable in the interests of shareholders and investors. Some degree of camouflage in corporation financial statements has also been seen of recent years in connection with the Business Profits War Tax. Quite a number of large corporations have refrained from disclosing to their shareholders in the published annual statements the amount of this taxation for which these corporations have been assessed. The tax has been lumped with other items, though it might be supposed that the actual extent of the burden imposed by what is admittedly very heavy special taxation would be a matter on which shareholders are reasonably entitled to clear and accurate information.

No doubt, in recent years, action by members of the accountancy profession, who have taken a public-spirited view of their duties and obligations, has improved considerably the general level of corporation financial statements in Canada. It is to be expected also that in the next revision of the Dominion Companies' Act, further legislative provisions will be put into force for the safeguarding of investors by the publication of

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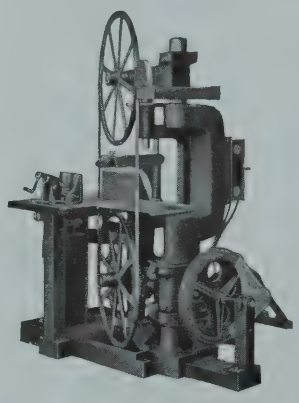
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full information in both prospectuses and financial statements. A desirable supplement to legislative enforcement in this connection would be a recognition by corporation executives generally of the rights in this matter of shareholders as real partners in the business, although limited partners, and realization that much information of importance to shareholders and investors can be given, without touching in the least upon office secrets that might be useful to hungry competitors. The examples already quoted, which could be multiplied in respect of many other balance sheet items, show this clearly enough.

Need Educating on Financial Matters

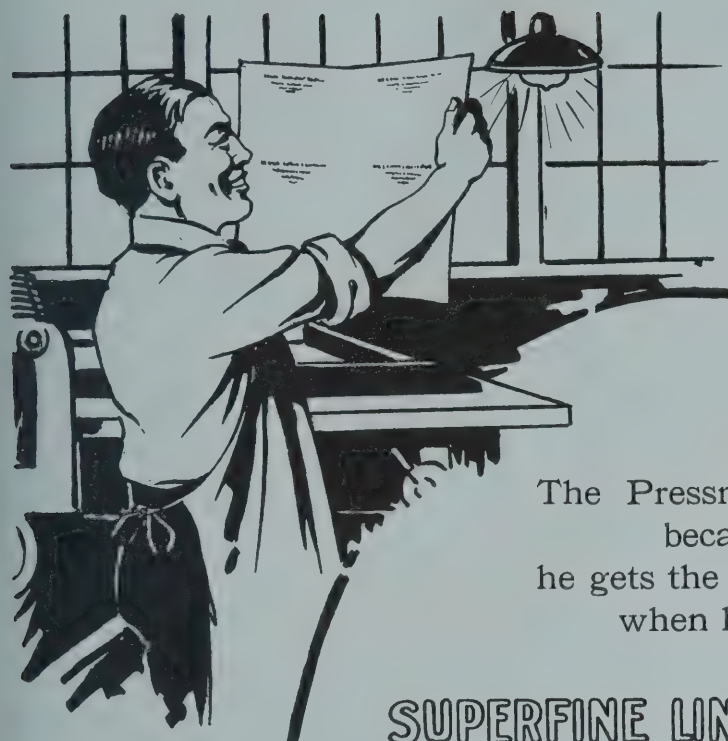
In this matter, it seems that corporative executives and financiers need to realize that they have a duty not merely to their shareholders and to investors, but to the country as a whole. Those engaged in the workings of Canadian finance are aware that at the present time, Canadians are taking a greater interest in the business of investment than ever before—and that in spite of the high cost of living. The originating cause of this interest is undoubtedly the wide distribution of the various War Loans, as a result of which many people have in the last year or two received, for the first time in their lives, incomes earned while they slept. That of the thousands who have shared this experience a considerable number are keen to increase that income is clear enough from the steady demand for sound investments which is reported by many financial houses. Moreover, the future of Canada, from the purely economic point of view, depends not merely on the capacity and willingness of Canadians to save, but upon their ability to employ those savings wisely in safe and productive investments. To have savings made through real effort, thrown away in foolish or dishonest ventures, will be in the coming years of onerous national financial burdens, not merely a tragedy for the individual, but a severe hindrance to the economic progress of the whole Dominion.

The education of the general public in matters of investment, the curbing of the deeply rooted human intinct to take the wildest of wild chances, will be necessarily a terribly long process. But something at least can be done in the stimulation of a healthy interest and common-sense in financial matters, through the securing of greater clearness in corporation financial statements. On that account, if for no other reason, it appears urgently desirable that the too-common practice of giving shareholders and investors a minimum of information regarding the industrial undertakings in which they are interested needs modification. Obviously those most intimately concerned with Canadian industry and finance would themselves benefit by the growth of Canadian investors, not merely in numbers, but in intelligence, while the ultimate advantages accruing to the Dominion as a whole through an increasingly intelligent use of our accumulated financial reserves, need no emphasis.

Profits Were Lower

American Cyanamid Company Reports Smaller Returns for Past Year

The American Cyanamid Company, which operates a chemical plant at Niagara Falls, Ont., besides plants in the United States, showed net profits on sales of $1,573,041 for the year ended June 30, 1919, this comparing with $2,345,235 for the preceding year. The president, Frank S. Washburn, reports the operation of the plant at Niagara Falls at full capacity for the entire year. Progress is being made in the transition from war to peace conditions.



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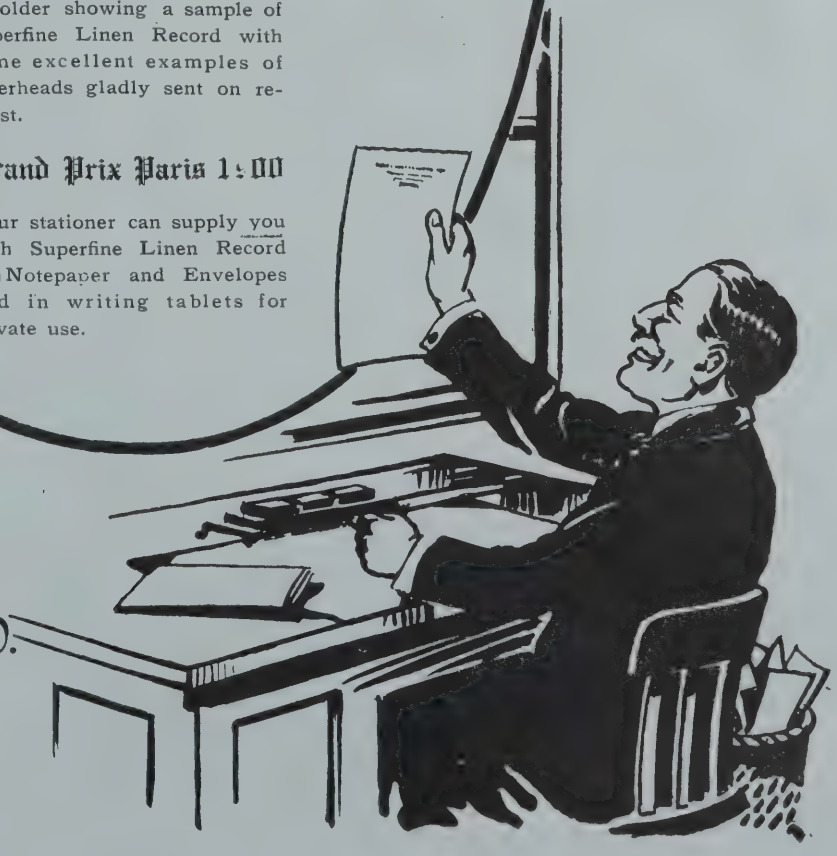
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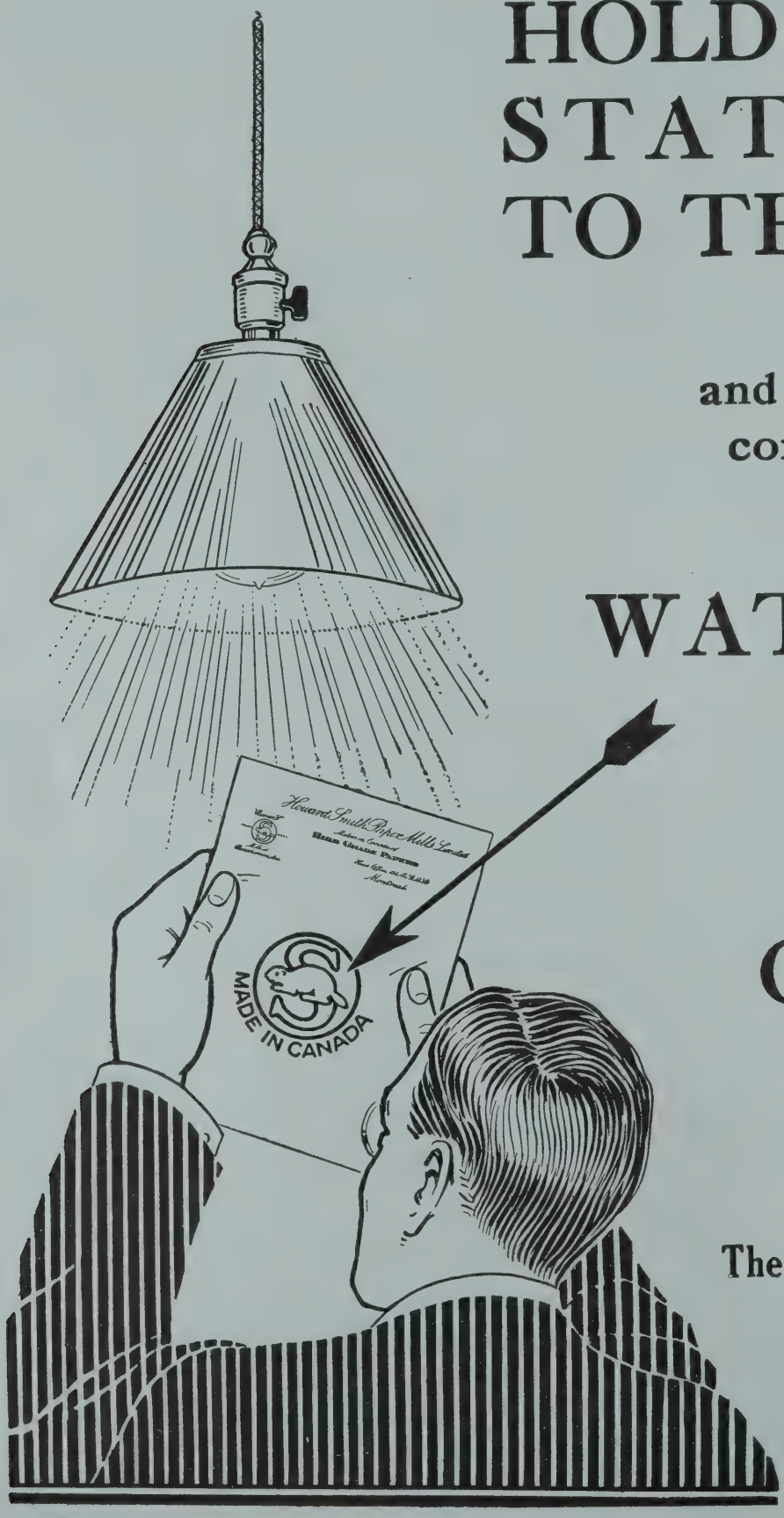
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Industrial Production in Relation to Wages

The amount of a wage is not an absolute but a relative fact. It seems almost incomprehensible that a man should be fired for suggesting a better way to work, yet in two-thirds of the manufacturing concerns of the United States such a suggestion will be resented. Wages are high when they do not result in production; they are low if they give production

By SAMUEL CROWTHER

(From the "World's Work")

The curious part of it all is that in most discussions of wages, what the man does for a wage is seldom considered, while page after page of testimony is taken as to how much it costs to live, although it must be self evident that as long as we work under a wage system, if production be not returned for wages, then a living wage can never exist. Inevitably a wage paid which is not wholly earned must be added into the price of the finished product and eventually raise the price of all products, so that when the wage earner goes to buy he is bound to find his money insufficient.

Two glaring examples of this are England and Germany to-day. In both countries great numbers of people are getting unemployment allowances. They are getting paid for doing nothing, while those who are at work are giving but little in return for their wages. The consequence is that the price of all commodities is so high that although the workers are receiving unheard of sums they are not able to live as well, in most cases, as they did before the war.

If a man should buy a tract of land and then instead of plowing and sowing, he should merely sit on his porch and contemplate, he would get scant sympathy if he said that his income from the farm was wholly insufficient to support life decently. Yet that is exactly what millions of workers are doing to-day and they are asking for government aid because of the straits in which they find themselves—because they will neither plow nor plant.

Ignorance not a Class Trait

There are two sides to this. Some workers are willing to plow and plant, but they think that the owner of the field takes more than is coming to him—that is, the employer is getting too much and they are getting too little. There are employers just as unintelligent as the workmen, who think that they too can get something for nothing—that they can get production without using brain power in the movement of their capital, in the planning of the work, and in the adequate paying of their men. Ignorance is not a class trait and, comparatively speaking, there are just as many employers who do not know how to do their work as there are workmen who do not know how to do theirs. That is one of the reasons that we are having so much trouble about wages.

Spurred on by the cost of living and not a little convinced that perhaps after all something can really be had for nothing, the wage earner has taken the bit in his teeth and is off at a gallop. It remains to be seen whether he will tire himself out before he spills the milk wagon.

The trade unionists, headed by Mr. Gompers, say after the manner of oracles, that wages must stay up. A few impolitic owners say that wages must come down and at once, but whenever an organization attempts to reduce wages it has a strike.

The workers and the employers alike talk about wages as though they were definite payments quite detached from mundane affairs and as though a dollar yesterday were the same as a dollar to-day and a dollar to-morrow—that there is some particular sanctity attached to the payments they made, say back in 1913 or 1914. Both sides quite forget that, since the beginning of time, the average worker has considered his wage too low, and the average employer has considered that same wage too high. Neither side talks of production and its relation to wages, but they agree that a dollar is a specific thing and, for the purpose of wage argument, they are very apt to take it as a standard of fixed value. The employer forgets that the dollar a day man disappeared long before the dollar watch went off the market and that we to-day are dealing in a different sort of currency. A moving picture producer who is thoroughly acquainted with the country, said to me most significantly not long since:

When Wages are High

"We used to reckon the nickel as the multiple of value for admission, but now it is the dime. It is foolish to raise an admission fee only five cents. We have made many experiments and we know that the man who formerly had a ten cent show has just as big an audience if he goes to twenty cents as if he goes to fifteen."

Whether wages will stay up or come down does not depend upon the employers, or upon Mr. Gompers, or upon any other group in the world. The particular number of counters used is not of the slightest importance anyway. Wages are too high when they do not give production. They are too low not when they do not support life, but when the return to the employer is higher than it should be. This is a very indefinite statement, but the whole matter of wages is indefinite because it gets down to particular cases, and the balance between labor and capital is not a thing which can be decided except in the crudest manner by national boards, for it is largely a matter of individual brains. Nationally fixed wages promote sloppy production and inevitably raise prices.

There is no particular reason why there should be a limit to wages, unless we are prepared to say there is a limit to skill and intelligence. That skill and intelligence are as much the business of the employer as they are of the worker. When an employer says he cannot pay more than five dollars a day in his business he really says in effect, "I have reached my limit of intelligence in the conduct of this business and I do not know how farther to improve the process of fabrication."

Take a case in point. A factory making automobile parts in Cleveland was swamped with orders. It had risen through a somewhat hazardous career, having been originally financed on about half a shoe string, and like so many firms connected

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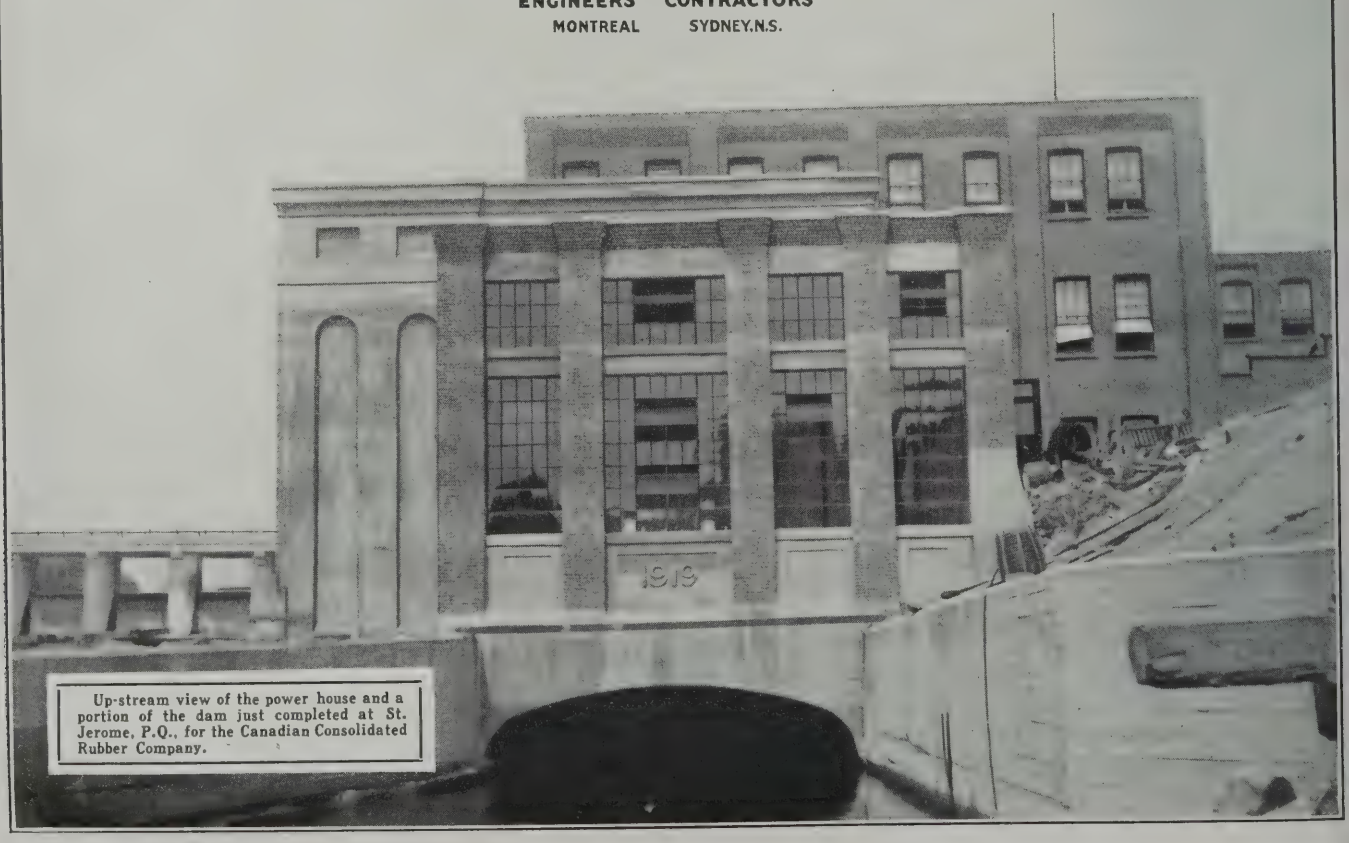
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with the automobile industry, it went ahead faster than its capital. The company wanted to borrow money, but the security from the banking standpoint was none too good and the only rates offered were exceedingly high. The workmen asked for higher wages, but the cost sheets showed that the company could not pay materially higher wages without so increasing the cost of the product that it would lose business to competitors.

In their straits they had recourse to an industrial counsel. He discovered a number of things. Among them was that, due to the bad arrangement of the machinery, the stock room, and the transportation inside the plant, they were paying 60 per cent. of their total shop wages for walking and not for working. He found that they were carrying nearly a million dollars' worth of raw stock, whereas they only used about $300,000 per month and all of their stock was at that time readily procurable from day to day. They cut down their stock, rearranged their factory and adjusted credits so as to be able to turn their capital every 60 days instead of slightly more than once a year, with the result that this concern found that it did not need more capital at all—that it needed only better management and planning. They arranged to pay their men on performance and shortly they were able, with their former plant facilities and without increasing the number of men, to do nearly double the business which they had previously thought impossible without a large increase in capital. The workers not only earn large amounts, but the company has greater profits than ever before.

If that company had succeeded in borrowing all the money it wanted it would not have put its house in order, but instead it would have gone sprawling along, wasting money in every direction, and trying to pay a satisfactory dividend on the additional capital which it did not need. With all of this management wastage added into the price of the product, it could not adequately have paid the men.

The workers are quite right when they say that capital which performs no service in an enterprise should not expect a profit and, although the largest dividend paid upon capital will seldom mean a considerable increase in wages if spread over the dividend period, yet the principle is entirely correct that watered stock or idle capital should not expect to receive a dividend. The converse is equally true. Workers who insist that more men than are necessary be kept on a job should be prepared to pay the wages of those men. And men who do not give a return are no better than the capital which does not give a return.

Workers Want the Facts

But in many cases wage disputes do not seem to turn so much on the gross wages paid as on the relation to what the company itself is earning. A very large company which is noted for extraordinary stupidity in treating with workers, not long since announced a cut in wages and almost at the same time a special dividend to stockholders. Very naturally and very properly, they immediately had a strike on their hands. This strike will cost them considerably more in lost business and in idle plant charges than the comparatively small amount of money which they expected to save by cutting wages. It is not so much that workers object to the reduction of wages as that they object to being taken in, to being made the goats, so to speak, for extraordinary profits. Profits may not be extraordinary, but if the workers think they are, it amounts to the same thing. If a thoroughly representative body of the workers is supplied with all the facts, wage adjustments on a fair basis can always be arrived at.

An illustration of this is the Filene Store in Boston. Many years ago, Mr. E. A. Filene received a protest from a cashier who, being accidently short in her accounts, asserted that the sum should not be deducted from her wages, because when she was over in her accounts, it was the company and not she who received the money. She thought mistakes could work both ways. Mr. Filene said, "Let us leave it to a third party." They did, and the third person decided against the firm; but the idea gave such general satisfaction that out of it grew a co-operative association of the employees which now to a very large degree helps in the management of the store. This co-operative association appoints a committee to audit the finances. Every employee in that store knows how much the company makes and more or less accurately the salary of every executive officer and, although they do not fix their own salaries, yet through a system of committees and arbitration boards, every person who believes that his salary is not right has an opportunity to show why it is not right. The employees have a flat wage and a commission on all sales made above the point where they have earned their wages according to the calculation of selling expense. It is a curious fact that the decisions of the board of arbitration from year to year will average about one half in favor of the company and one half in favor of the employees.

Mass Meetings Are Held

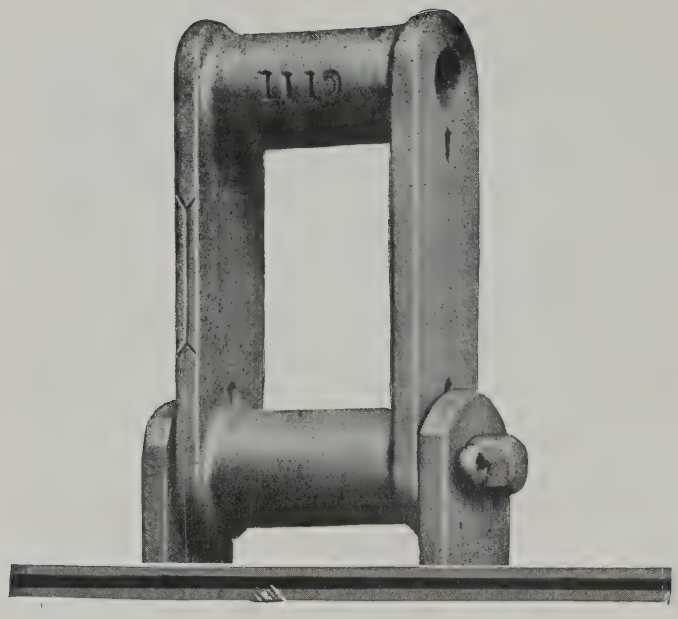
Take another case. Up at Bantam, Connecticut, is a machine plant employing about one hundred men. These men assemble at a mass meeting once a month to talk over business affairs, to hear complaints if there are any, and more especially, constructively to discuss the advancement of the business. A small percentage of these men are American born, nearly all of them came into the plant as unskilled laborers. They gained their training within this place. They have committees to attend to various details, but the working body being small, they transact most of their business in mass meetings.

That plant is in the war zone only thirty miles from Bridgeport, and at times during the war Bridgeport was offering three times the wages which were being paid at the smaller plant, but during that time only two men left for the high wages, and after a few weeks both of them came back. Long before the Armistice, the meetings began to discuss what they were going to do when peace came. Their wages had been increased, they knew exactly what the company was doing, what the company was making, and practically what each executive was drawing in the way of salary. Over and above their wages they receive a dividend on the gross factory production on the theory that if the factory turns out the proper amount of goods, it is up to the management to make the sales. They agreed among themselves that the big thing was to keep going after the Armistice and that, if it were necessary, they would reduce their wages and go upon a shorter time.

The salesmen of the company also attended those meetings and those salesmen went out and secured sufficient orders for advance work to be delivered after peace—the company was 100 per cent. on war work—and where many companies were demanding that the Government pay money for the cancellation of their contracts, this company on the day of the Armistice wired Washington for permission to cancel its contracts and within two days was going ahead full time on peace work! The only reason for the delay of two days was that most of the workers participated in every parade within a radius of twenty miles.

That plant has not found it necessary to reduce wages. Other employers in that same valley, whose people do not help them manage, have reduced wages and have been most of the time tied up with serious strikes.

Take another case. Out in Fort Wayne, Indiana, is a piano factory which is organized as a kind of industrial democracy. The executives of the company form a cabinet,



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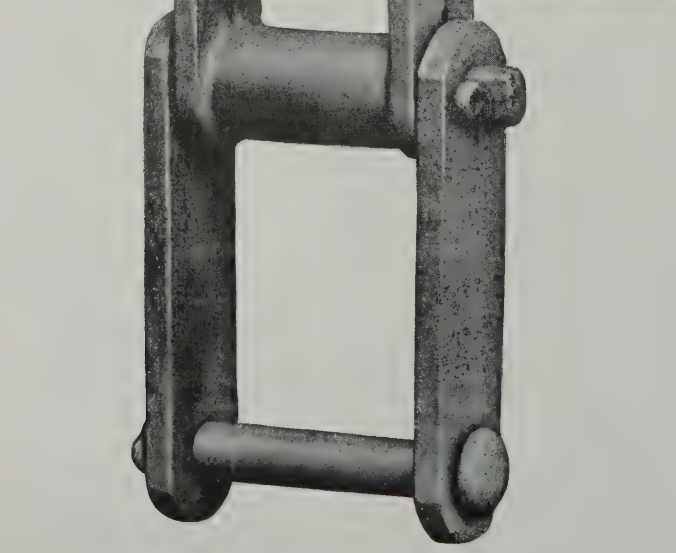
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the superintendents and foremen meet in a body, which is called the "senate," while the workmen elect by secret ballot to the "house of representatives." These three bodies legislate for the plant. These men in 1914 during the depression, by their own action reduced their wages and went on part time. There were then 265 of them, but economic reasons caused their number gradually to dwindle until only 168 were left. These devised so many new methods and so many new machines that later, when times picked up, and the boom began, they were able, without increasing their number, to double what was supposed to be the former capacity of the plant. There has been no wage trouble. Their productivity and ingenuity have made them masters of their craft and it is profitable for the company to pay them double what men in similar lines receive. In more than one case, after having devised a better method, the men have voluntarily rearranged their piece rates because with their new methods the old rate produced an income which they felt was disproportionate to the job. In addition to their rates and wages each employee shares in what is known as an "economy dividend"—the relative savings in production costs are divided "fifty-fifty" between the company and the men.

Wages and Labor Disorders

What is a job worth? The average manufacturer will tell you that he cannot pay above the market rate, whatever that may be, and he will view dollars of wages exactly as a workman views them—that is, without any relation to what the one is going to get, or the other to give, in return for the money. A certain trade can pay so much and it cannot pay more—that is settled. The wage is high or low according to the number of dollars it contains, regardless of production—that is, regardless of return per dollar of wages. Because a man who formerly got $18 a week now finds $25 or $30 in his envelope he is convinced that he is receiving fairly high wages, while the employer is quite certain that he is paying high wages. One hears everywhere the complaint that the price of an article is so high because of the wages which must be paid. Somehow or other every discussion of employment troubles eventually gets around to wages. Now just what have wages to do with what is called "labor disorder," when are they high and when are they low, and is there any particular reason that wages should be lowered or should be raised?

Wages have this much to do with labor trouble and no more: If the wage which a man receives for a day's work is not sufficient to support him and leave even a moderate amount for pleasure, the wage is indeed too low; if the wage does not increase with the intelligence and production of the man, if it is possible for him to look ahead and see an absolute bar beyond which he cannot go, then something is the matter with the wage. High wages do not mean contentment and, if employment is arranged solely on the basis of wages, the men will neither give good service nor stay on their jobs. During the war it was the highest and not the lowest wage concerns which had the greatest turnover of labor.

Turnover of labor is the number of men who must be employed each year to retain an average force, and during the war, in some very high-wage establishments that employed on an average of 5,000 men, 25,000 men were employed during the year.

Labor and a Market Rate

Wages are high when they do not result in production; they are low—no matter how many dollars are contained in them—if they give production. The union between wages and production is inseparable, but it is neglected by nearly all employers and by most employees. There is somehow an idea, regardless of all the facts, that a particular job is worth just so much and no more. Hence we have what is

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TO uphold the Glory we have jointly earned—to honor our noble dead—to comfort the wounded, and extend to the men returned the hand of prosperous welcome, we must cast aside all forebodings and face the future with unbounded courage and confidence and, without a shadow of doubt, declare to the World that this Nation, which was so quickly and successfully transformed to a War basis, can be depended upon to revert to Peace conditions with equal success. The buyer and seller must recognize their duty to the Nation and co-operate fully to the end that all products that can be produced in Canada by Canadian workmen shall not be purchased elsewhere.

OUR Duty is plain; Canada with Canadian labor and capital can produce, manufacture and distribute products sufficient to keep the wheels of industry turning to the limit. The song of Prosperity and Happiness should ring out all over the land. Let us sincerely pledge to the extent of our needs, to purchase materials produced in Canada by Canadian Workmen, and the result of our efforts will return to us the Blessings of a Prosperous and Happy Nation.

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Wire
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Angles
Channels
Plow Beams

called the market rate, which in turn varies according to the demand, as compared with the supply of labor.

But the best employers of the country have long since given up any idea that there is such a thing as a market rate for labor. There is no market rate for professional men above a certain grade, there is no market rate for surgical operations, or for good portrait painting. In fact we find the market rate only in mediocrity. That is what farseeing employers have discovered and, by lifting themselves out of mediocrity, have found it unneccessary even to inquire what the market rate is.

The market rate does not amount to much in merchandising. If an article is thoroughly good, it is bought eagerly regardless of the price, because it gives service. And that is just the way some employers have regarded the value of the services of those whom they hire; instead of looking at wages as so much paid out, they have looked at them in the longer way of service purchased and they have found that for $2 rightly paid they can purchase more than twice as much service as for $1.

There are many ways of paying wages and there is no rule at all involved, there is no best way—the best way is that which suits the circumstances. In many places what are called "piece rates" obtain; that is, a man is paid for the number of articles or operations which he completes during the day. Piece rates are generally unsatisfactory, because it is a very difficult matter properly to fix the rates. A very common loose method is this: Suppose a group of girls have been working on a certain article for some time. The superintendent drops in, chats with the foreman, and then asks why those girls shouldn't go on piece rates.

"What will the best of them do a day," he queries.

"Well, the fat girl will do about 200 and the big girl about 210."

"Then if we make the day's quota 225, they will all have to hustle to get the money they are getting now."

"You bet they will," responds the foreman, "and it will do them good."

And on that basis the rate is fixed with the idea in mind that an economy has been accomplished, when as a matter of fact, the only accomplishment has been in the way of creating a certain amount of resentment and dissatisfaction, which means that workmanship will suffer.

A Conclusion About Wages

The objection of intelligent workmen to better methods is that, when they do give service and make money, they immediately find that their rates are cut to such a point that their additional service results in no greater financial return to them than the previous poor service. In this, in many instances, they are perfectly correct, for the short-sighted employer does cut down when he thinks his men are "making all they ought to make."

From the long and varied experience of many able men this conclusion on wages can be deduced: "A wage is never of itself high or low, but the amount is relative and its righteousness depends upon the co-ordination of the respective skills of both capital and labor. It is not a fixed, but a shifting payment, depending upon and adjusted to performance, and that adjustment is best made by frequent conference between the employer and the employed."

But recently no fixed wage has been of itself satisfactory, and methods have been devised, some good and some bad, further to compensate according to mass performance and to establish a reason for working with the company.

The wage is the measure of the workers' contribution—how is it to be measured?

THE CANADIAN APPRAISAL COMPANY
LIMITED

The market conditions of high costs, which arose soon after the outbreak of war and have ruled ever since, have very largely destroyed the significance of figures of original costs appearing in Plant Accounts, particularly where these represent properties installed or acquired in pre-war times. Such figures are to-day misleading, and dangerous if adopted as a basis for insurance, and equally so for determining present day manufacturing costs.

Complete Insurance protection calls for present day values. The cost of replacing any but a new plant to-day would almost invariably be much greater than when it was originally installed, and if it is not insured on this basis of to-day's values you become a co-insurer; in other words, you are not fully protected, and in the event of a loss by fire you may have to bear a substantial part of such loss yourselves.

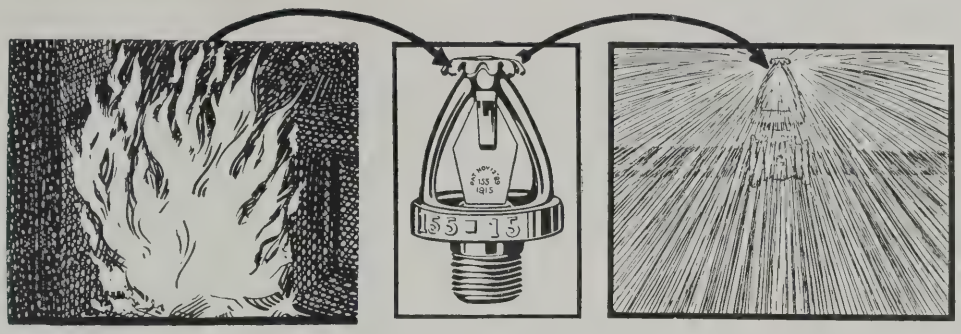
For the same reasons, a cost system based on pre-war costs is to-day a delusion and a snare.

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GERMANY'S FUTURE IN INDUSTRY

According to this eminent British banking authority, the Allies are now interested in Germany as a business concern from which they must draw dividends. Otherwise they will have no chance of collecting the indemnities imposed upon the defeated nation.

From Barclay's Bank Bulletin.

The question of the export trade of enemy countries is a matter rapidly coming into prominence. Evidence—in some quarters regarded as perturbing—is already forthcoming that Germany's exports to Holland and the Scandinavian countries are increasing, largely, it is thought, because her depreciated exchange enables the importer to purchase very cheaply the marks necessary to pay for his German purchases.

Unquestionably a depreciated exchange does have this effect—it encourages exports and discourages imports, and so long as Germany's exchange remains depreciated, so long will she possess an advantage in selling her goods in the world's markets, providing her increased cost of production caused by inflation does not negative the advantage given by her depreciated exchange.

Effect of Inflation on Exchanges

This question is important and endeavors are being made in commercial circles to connect the depreciated exchange with the inflated currency. Actually there is no direct connection, for the value of currency is measured by its internal purchasing power, while that of exchange is measured by its value in exchange for other currencies and so by its external purchasing power. To take an extreme example—if under normal conditions a country which possessed a note issue based pound for pound on gold, yet prohibited gold exports, it would be possible by reason of an adverse trade balance for her exchanges to be quoted at a substantial discount. Equally it would be possible for a country with an unduly inflated and inconvertible currency—a country not possessing one single ounce of gold—to build up a favorable balance of trade such as would maintain her exchanges at a premium. This second position is extremely improbable because of the indirect effect of inflation on exchanges. The effect of inflation is to increase the cost of production and this has the effect of prejudicing and reducing exports. With the reduction in the volume of exports the foreign exchanges depreciate in value until such time as the depreciation or cheapness of the exchanges counterbalances the internal increase in the cost of production. Other things being equal, the foreign exchange quotation for a country possessing an inconvertible and inflated currency will stabilize at a figure where the high internal cost of production is negatived by the discount on her exchange.

Stimulation of Exports

Now under circumstances such as those existing to-day, when inflation is world-wide, let us take the case of a country possessing a depreciated exchange and an inconvertible currency and assume that approximately the inflation in that country is not greater than that in other countries. Here the cost of production will be increased by the inflation, but only in proportion to the increase in other countries. Exports therefore, will not be prejudiced by cost of production but they will be stimulated by the depreciated exchange. The effect of the stimulation of exports will be to restore gradually the balance of trade and to bring the exchange to parity.

Now take the position of a country which in existing conditions possesses a depreciated exchange and an inflated and



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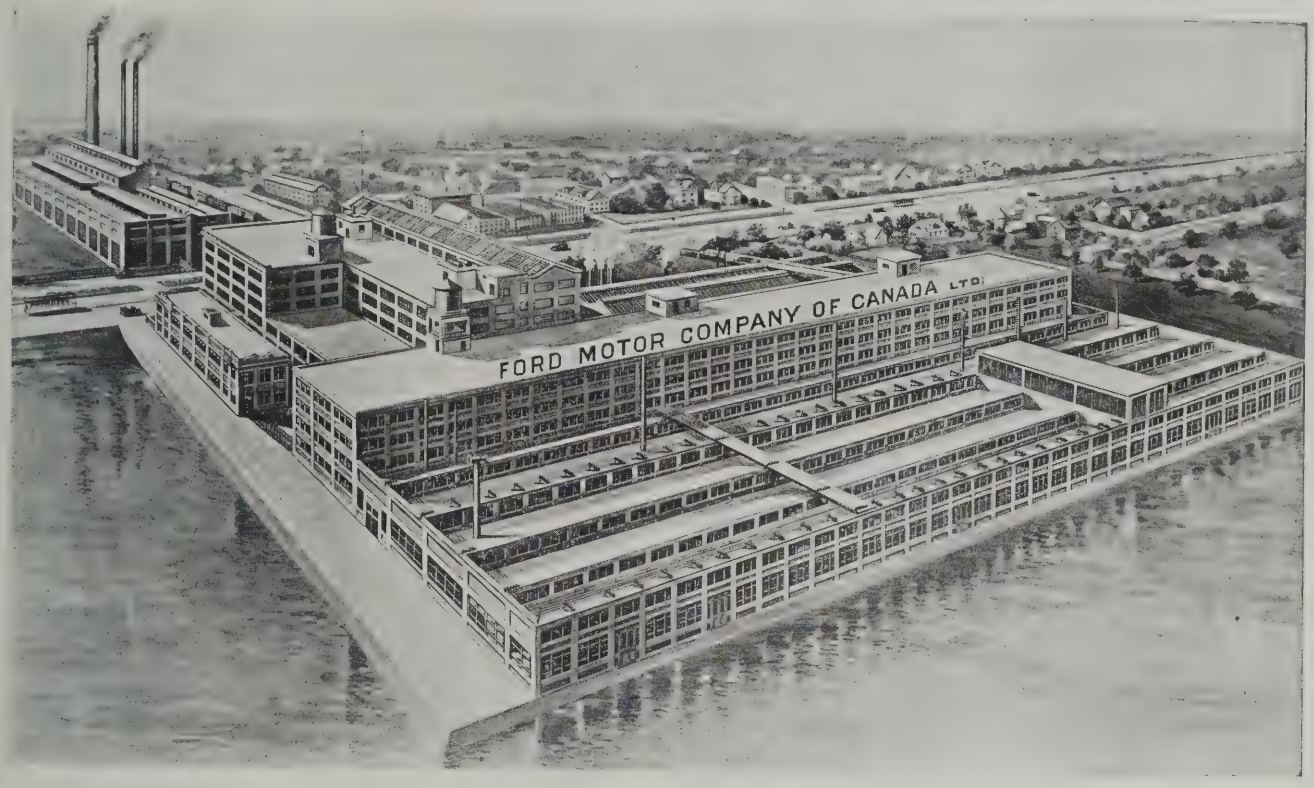
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inconvertible currency, the inflation being greater than that existing in other countries. Here the undue inflation will tend to produce the high prices prejudicial to export trade while the depreciation in the exchanges will only stimulate exports if it is more than sufficient to counterbalance the higher prices. Even then the increase in exports will merely continue until the exchange is brought to a figure where the depreciation approximately offsets the increase in the cost of production.

Germany's Exchange Position

This would appear to be the position of Germany. For various reasons—sentimental and otherwise—the depreciation in her exchanges is more than sufficient to counterbalance the increased cost of production caused by excessive inflation. Because of this, exports are stimulated. As has been shown, however, this effect—other things being equal—can only be temporary.

The trading position would not be remedied, as is suggested in certain quarters, if such a proportion of Germany's notes and bank balances were cancelled as would bring the degree of inflation existing there approximately into line with that existing elsewhere. On the contrary, the first effect of such action would be to decrease the cost of production and thus increase exports until such time as the exchange stabilized itself at a new level. Other things are not, however, equal, for Germany, in order to pay her war indemnities, must of necessity export far more than she imports, using the balance for indemnity payments.

In few words and simply stated this is the theory when applied to a country which cannot adjust its trade balance by means of exporting gold or securities. There are, however, various factors which may operate to disturb its exact working. For instance, cost of production is affected by various influences other than inflation. There is the question of output per individual, the efficiency of organization, the standard of comfort demanded as represented by wages and profits, and also such matters as tariffs and natural advantages.

Taking the instance of Germany, there is the effect of war indemnities to be considered, for to pay these Germany must of necessity export far more than she imports, using the balance for indemnity payments. In these circumstances a consideration of her position will be of interest, for although opinions may differ as to the severity or otherwise of the terms of the peace treaty, there can be no doubt that Germany has a great task before her compared with which our reconstruction difficulties are quite trifling.

In a Worse Financial Position

Always ignoring the United States, whose position is unique, Germany's war debt per head of her population shows a more favorable percentage to the capital per head of population than that of the other belligerents, but this position is altered when allowance is made for the loss of territory and population under the peace treaty. Starting, therefore, in a worse financial position than the allies, Germany will have to pay to them vast sums in the shape of indemnities. When the present internal condition of Germany is remembered, together with the facts connected with the working of the blockade, the wisdom of allocating some portion of the first £1,000,000,000 to the provision of food and raw materials becomes apparent—indeed, unless this is done and done liberally, there will be little hope of Germany meeting within

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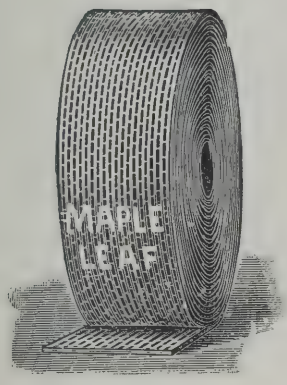
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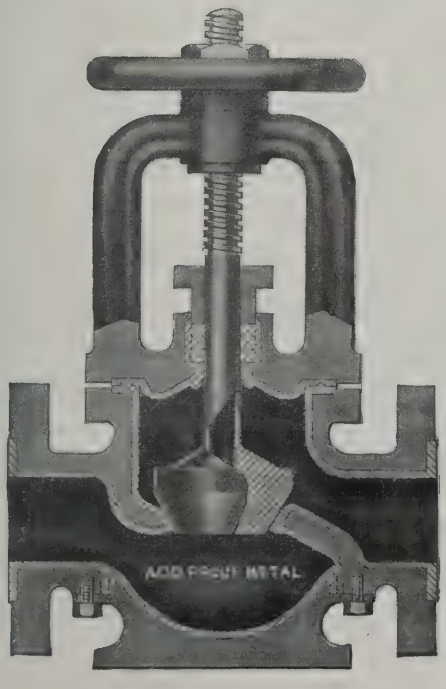
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the specified time even the first thousand millions, to say nothing of the four thousand millions to follow.

Bargaining with Germany for an indemnity resolves itself into bargaining for a larger share of her export business.

Allies Must Support German Industry

Unpalatable as it may be to many, the fact is that, because of the indemnities they are to receive, the allies are now interested in Germany as a business concern—not as a beaten, disorganized and ill-found nation—and if they are to draw from that business the dividends they require and demand, then not only will it have to be superbly organized but it will demand the unremitting energy of its workpeople and the ungrudging economic assistance of the would-be receivers of dividends. Facts are stubborn things and their inevitable consequences are better faced than ignored. The allies have to face the fact that if they are to receive from Germany a great contribution of their war expenses they must first of all help her to become again a great industrial nation, for apart from a comparatively trifling total of gold and foreign securities the indemnity will indirectly have to be paid for and accepted in goods. It cannot be too strongly emphasized that an indemnity must be paid in kind. Therefore Germany must manufacture and ship her goods. She must also find buyers, otherwise she cannot pay. It follows that the acceptance of an indemnity forces the allies to trade with her.

Still facing the facts as they are, this will involve admitting German products into allied markets, and even this will be useless unless we, the allied peoples, despite resolutions to the contrary, buy freely the things that are "Made in Germany." If we do not do this, or if we render it impossible for Germany to compete with us in the world's markets—then we must sacrifice the indemnity.

Further, sanity tells us that no people will continue to work and strive without reward or hope, and it follows that the allies must assist Germany, not only to an industrial reconstruction adequate to the production of a surplus of commodities large enough to meet indemnity installments, but also to provide the German people with sufficient present comfort and hope of future comfort to induce and enable them to put forth their maximum effort. Briefly, then, the allies must individually recognize that, having in righteous judgment sat on Germany and assessed the penalty, they cannot, in common justice, refuse her the only possible means of payment—payment in kind. Admitting this, the sooner they organize and settle down to business with their late enemies the sooner they realize the impossibility of reconciling the receipt of an indemnity with efforts to keep Germany out of the world's markets, and with such remarks as "never again will I knowingly buy an article 'made in Germany,'" they sooner they help Germany to re-establish her industries and settle down to an ordered existence, free from Bolshevik disturbances, the better will it be for the world at large and for the ultimate success of the League of Nations.

Develop Productive Powers

Reconstruction needs and the compulsory abstinence of the past five years will supply the whole world with adequate work for a long time to come, and it is for British trade to develop energetically its productive powers, and for the British government to make the way smooth for private enterprise. The fact that Germany is already returning to the Scandinavian markets is not a matter for perturbation, for, apart from other considerations, it is an inevitable consequence of the indemnities that in the future, as in the past, she will be our competitor in foreign markets.



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CHANGES IN THE COST OF LIVING

Between July, 1914 and July 1919, an increase of 71 per cent. was recorded in the cost of living of American wage-earners. The cost of clothing increased most, being double what it was in 1914. Food increased by 85 per cent., and fuel, heat and light, by 57 per cent. These are findings of the National Industrial Conference Board.

(From the "Manufacturers' News.")

The cost of living for American wage-earners was 71 per cent. higher in July, 1919, than at the outbreak of the world war in July, 1914, according to a preliminary statement issued to-day by the National Industrial Conference Board based on a careful survey of conditions the country over. This represents an advance of 6 per cent. since March, 1919, and of 12 per cent. since June, 1918. The increase of 71 per cent. to July, 1919, marks the highest point yet reached and compares with an increase of 61.3 per cent. to March, 1919; of 65.9 per cent. to November, 1918, and of 52.3 per cent. to June, 1918.

The total increase for the five-year period since the beginning of the war, in the average cost of each of the principal items entering into the family budget was:

	Per Cent.
All items	70.8
Food	85
Shelter	28
Clothing	100
Fuel, heat and light	57
Sundries	63

Increases since last March were as follows:

	Per Cent.
All items	5.9
Food	5.7
Shelter	4.9
Clothing	10.5
Fuel, heat and light	No change
Sundries	5

In combining these separate items to obtain the increase in the budget as a whole, account has been taken of the fact that approximately 43 per cent. of the income of the average wage-earner's family is spent for food; 18 per cent. for shelter; 13 per cent. for clothing; 6 per cent. for fuel, heat, and light, and 20 per cent. for sundries. This distribution is based on studies of the expenditures of a large number of families made by the United States Bureau of Labor Statistics and other authoritative government and private agencies. The method of computing the change in the cost of living on the basis of the increases found for the separate items by the National Industrial Conference Board is shown below:

Budget items.	Relative importance in family budget. Per cent.	Increase in cost between July, 1914, and July, 1919. Per cent.	Increase as related to total budget. Per cent.
All items	100.0		70.8
Food	43.1	85*	36.6
Shelter	17.7	28	5.0
Clothing	13.2	100	13.2
Fuel, heat and light	5.6	57	3.2
Sundries	20.4	63	12.8

*Based on an increase of 84 per cent. up to June 15th, 1919, as reported by the United States Bureau of Labor Statistics.

The allocation of expenditures for the different budget items usually varies so little among the families of wage-earners that with any reasonable distribution there would be but slight deviation from the average increase of 71 per cent. since 1914. This figure is, therefore, broadly representative of conditions the country over. But it should be emphasized that special local, racial, or other circumstances may at times make necessary some revision to adapt this estimate to meet specific conditions. This is especially true of rents, since changes in this item have at times differed considerably in separate communities.

Estimates of changes in the cost of living made by the board on the basis of retail prices and expenditures for the

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separate budget items by average families must not be confused with changes in wholesale price index numbers such as Bradstreet's, Dun's or those of the *New York Times* Annalist. Wholesale commodity prices do not necessarily change concurrently with retail prices and, as already pointed out by the board, they often tend to advance faster than retail quotations. Although valuable as an index of market conditions, commodity prices do not take account of the relative importance of the different items in the family budget. Likewise changes in retail prices of food should not be used as representing changes in the cost of living, since they measure but one item in the budget. The only accurate measure of changes in the cost of living is that based on retail prices weighted according to the proportion of the total budget spent for each item by average families.

More detailed information regarding changes in the cost of the separate budget items is given briefly below. Average retail prices of food as collected by the United States Bureau of Labor Statistics have been accepted by the board as the best available measure of changes in the cost of this item. For all others, original data were secured by the board through replies to detailed questionnaires distributed to a large number of retail merchants, real estate brokers, and others in close touch with local conditions in all parts of the country.

Advance in Retail Food Prices

Average retail prices of food were slightly more than 5 per cent. higher on June 15, 1919, than on March 15, 1919, and 84 per cent. higher than before the war, on the basis of average prices for the year 1913. The increase within the year ending June 15, 1919, was 14 per cent. These figures cover price changes of 22 articles of food as reported by over 2,000 dealers. Since the bureau's estimate of 84 per cent. increase is for June 15, a slight addition was made by the board to allow for a possible rise in the last half of the month.

Some of the articles showing the most significant price changes since June, 1918, were onions, the price of which increased 133 per cent.; prunes, 53 per cent.; coffee, 41 per cent.; potatoes, 31 per cent.; cheese, 28 per cent.; eggs, 26 per cent.; butter, 24 per cent.; lard, 23 per cent.; sugar, 16 per cent.; milk, 15 per cent.; and flour, 12 per cent. The prices of chuck roast and plate beef decreased 5 per cent., of corn meal, 6 per cent., and of navy beans, 31 per cent. Compared with June, 1913, the average prices of the following articles in June, 1919, were 100 per cent. or more higher: sugar, pork chops, ham, bacon, potatoes, corn meal, flour, and lard.

Rapid Increase in House Rents

Reports regarding rent conditions were received from practically all of the cities in the United States having a population of 50,000 or over, and from a number of smaller places. Of more than 300 statements from persons closely in touch with rents as paid by wage-earners in these separate cities, only one recorded a decrease in this item since March, 1919. In many places rents were still rising, although few pronounced increases were found. Frequently the larger increases reported in July were in those localities where former advances had been least, indicating that the tendency to a leveling of the total increase in rents the country over, which had been evident in March, was still in progress in July. The estimate of 28 per cent. as the average rise in rents since 1914 is, therefore, of more general application than that of 22 per cent. up to March, 1919; of 20 per cent. up to November, 1918; or of 15 per cent. up to June, 1918, as given in previous reports by the board. Between March, 1919, and July, 1919, the average increase in rents for the country as a whole was about

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5 per cent. These are averages for all sections of the country and reflect a considerable variety of rent conditions.

The opinion was general that rents would continue to rise, since, on account of the abnormally high cost of construction and maintenance, the number of houses being built is inadequate to meet the demand for accommodations. In some places the housing shortage had stimulated popular "own your own home" campaigns and various schemes to assist people to build.

The advance of 100 per cent. in the cost of clothing is larger than that of any other of the major budget items. The average outlay for a family's clothing needs in July, 1919, was 10.5 per cent. more than in March, and 3.6 per cent. more than in November, 1918, when the previous high peak of clothing prices was reached. Since the summer of 1918, the average cost of clothing had advanced 13 per cent. These increases were obtained by combining the percentage of change in the cost of the separate articles according to their relative importance in the total clothing budget.

Quotations for 29 types of most commonly used yard goods and wearing apparel were secured from 146 dealers in 43 cities. For every article the average price was higher in July, 1919, than in March. As compared with November, 1918, changes varied, but the most important were upward. Cotton and woollen yard goods, overalls, knit and muslin underwear, and the cheaper grades of work shirts, although higher in price than in March, were slightly lower than in November. Prices of yard goods increased more than did prices of made-up garments in the five-year period since 1914, but the cost of women's shoes advanced 131 per cent.; women's gloves, 125 per cent.; women's knit underwear, 120 per cent.; women's coats, 116 per cent. and women's hosiery, 104 per cent. between July, 1914, and July, 1919. In every case these marked the highest points reached since 1914. Several articles of men's clothing also cost 100 per cent. more than before the war.

Dealers very generally expressed the opinion that clothing prices were likely to go still higher.

Fuel, Heat and Light

No important change in the combined cost of fuel, heat and light between March and July, 1919, was indicated. While there was a small increase in the cost of anthracite, there was a corresponding decrease in the price of bituminous coal. Prices of other items in this group were practically unchanged. The average increase in the total cost of fuel, heat and light combined, therefore, is again placed at 57 per cent., as in the March study.

Retail price quotations of anthracite and bituminous coal for household use, secured in July, 1919, from 97 dealers in 43 cities, were analyzed. These showed changes since last March for anthracite varying from a 9 per cent. increase in Boston, to a 9 per cent. decrease in Charleston, S.C., and an average increase for the country as a whole, of 1 per cent. to 2 per cent. The total increase since the beginning of the war in 1914 was between 54 per cent. and 57 per cent. The increase for bituminous coal within the five-year period was 55 per cent.

Coal dealers were generally of the opinion that the price of anthracite would advance further within the next few months, but there were suggestions that the price of bituminous coal might drop.

Average retail prices of coke and wood fell in a number of cities, but in others they advanced; for the entire country no significant difference was indicated.

Few important changes in the cost of gas and electricity to small consumers between March and July, 1919, were reported, although the tendency of rates was upward.

Reports regarding car fare, one of the principal items in the sundries group, were received from 143 cities. In 121 of



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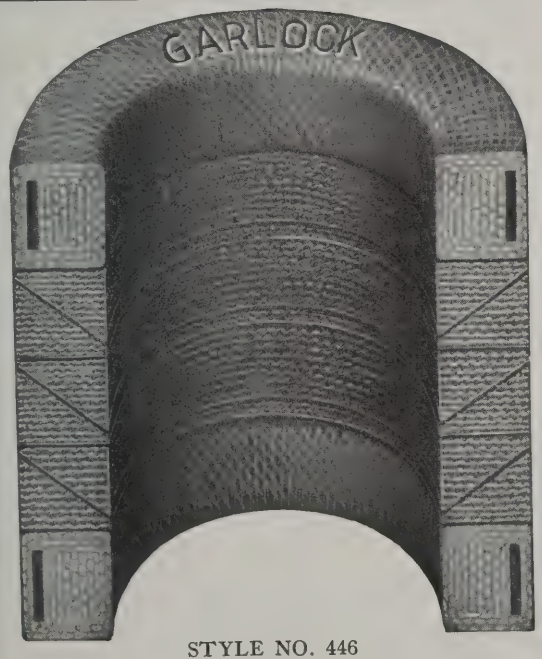
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these there had been no change between March and July, 1919, and in 3 there was a decrease. Such increases as occurred were small. Changes in car fare the country over were, therefore, unimportant. The retail price of tobacco was somewhat higher in July than it had been in March, partly because of increased taxes. The tax on candy, soda water, and ice cream as well as on toilet preparations and drugs also contributed to raise the cost of these items. Household furnishings and supplies were, in many instances, higher in July than they had been in March. On the other hand, the prices of admission to amusement places, of reading materials, and of doctors' services remained about the same. Postage decreased.

From these separate estimates it appears that there was a small increase in the cost of all sundries combined between March, 1919, and July, 1919. This has been placed at 5 per cent. It must be understood, however, that families vary more in their expenditures for sundries than for any other of the budget items and that no estimated change can be said to be typical. The estimate of 5 per cent. increase is based on a wide variety of combination and is as representative of the change that has occurred as any that can be reached. This brings the total increase in the cost of sundries since 1914 to 64 per cent. as contrasted with 55 per cent. in March, 1919, and November, 1918, and 50 per cent. in June, 1918.

Recapitulation of Complete Budget

A summary of changes in the cost of living as determined in the four surveys made by the National Industrial Conference Board is given in the table below:

Budget items.	July, 1914, to June, 1918. Per cent.	July, 1914, to Nov., 1918. Per cent.	July, 1914, to Mar., 1919. Per cent.	July, 1914, to July, 1919. Per cent.
All items	52.3	65.9	61.3	70.8
Food	62	83	75	85*
Shelter	15	20	22	28
Clothing	77	93	81	100
Fuel, heat & light	45	55	57	57
Sundries	50	55	55	63

*Based on an increase of 84 per cent. up to June 15th, 1919, as reported by the United States Bureau of Labor Statistics.

Get Trenton Plant

American Interests Secure Possession of Chemical Plant Located at Trenton, Ont.

Briggs & Turivas, Chicago and New York, dealers in iron and steel scrap and salvage, have purchased from the Imperial Munitions Board of Canada the entire plant and property of the British Chemical Co., Ltd., located at Trenton, Ont. A Canadian Corporation under the name of Briggs & Turivas of Canada, Ltd., and capitalized at $1,200,000, has been formed, with main offices in the Canadian Pacific R. R. Building at Toronto, Ont., and a branch office at Trenton, Ont. The property consists of 255 acres and fronts the Trenton River, a navigable stream. Three trunk line railroads enter the plant. The British Chemical Co. was formed and built during the war at an outlay of approximately $8,000,000. The equipment consists principally of two separate and complete sulphuric acid chamber plants, sulphuric acid concentrators, a nitric acid plant, an alcohol rectifying plant, two refrigerating plants, a smokeless powder plant, a complete high pressure fire system, two miles of narrow gauge trackage with electric locomotives and trucks, two boiler houses, electrical equipment, warehouses, storage tanks, administration building, etc. The new owners are as yet undecided as to the extent of the operations of the plant for the future, but it is expected that the powder manufacturing apparatus and equipment, and possibly the nitric acid plant, will be dismantled and disposed of, allowing the sulphuric acid plants to stand.



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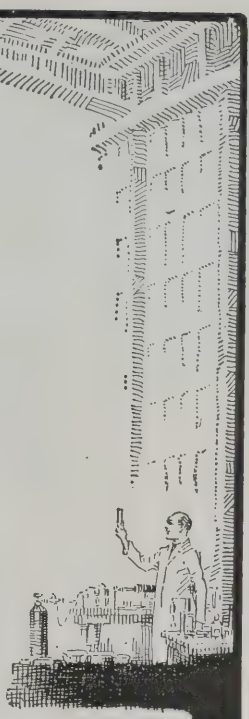
—that oil, water, or even more complex material you are using in your manufacturing? Has it the requisite properties? Are you ***positive*** it is doing what you think it is?

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ENLARGING THE WORKMAN'S DOLLAR

Many employers have doubtless considered possible ways of increasing compensation to workers without raising wages. Often co-operative or company stores have been considered, but there have been too many failures in attempts of this kind to permit of hasty action. In the following article the possibilities of granting concessions to competent dealers are set forth.

By Emerson P. Harris.
(From "Industrial Management.")

The conditions under which most employees of big industrial companies spend their money for family supplies leaves much to be desired. Where no effort is made in their behalf, workmen are at best taxed for the present chaotic and wasteful system of merchandising, and at most, they are exploited by a raise in prices whenever there is a raise in wages. The writer is told by an officer of a large mining company that this latter practice is not uncommon among retailers who sell to this company's men.

Many managers of industrial companies have felt moved to try to reduce the cost of purveying family supplies to their workmen by conducting stores in their interest. But usually, for one reason or another, such undertakings are discontinued after a comparatively short trial. The reason for this lack of success could not be given in detail without information which is not at present available. But there is one broad fact which goes far to answer the question, and that is that what the employer seeks to save for his employees is absorbed in inefficient buying and management on the part of the manager in charge of the company store. It is assumed that there is sufficient gross profit usually made by the local dealers to make it possible to save money for consumers, even though the consumers' store is run by a hired manager less efficiently than the individually owned store. This is a fatal mistake. The local retailer may sell at prices averaging as much as 25 per cent. gross profit on the retail price, and yet his expenses may be such as to leave him no profit above a small salary for his own work. Let a store start which is owned either by a co-operative society of employees or by the employing company, and be run by a hired manager, and the chances are that the inexperience and inefficiency of the management will be such that the new store cannot even meet the prices of the existing stores, let alone making a saving for its customers.

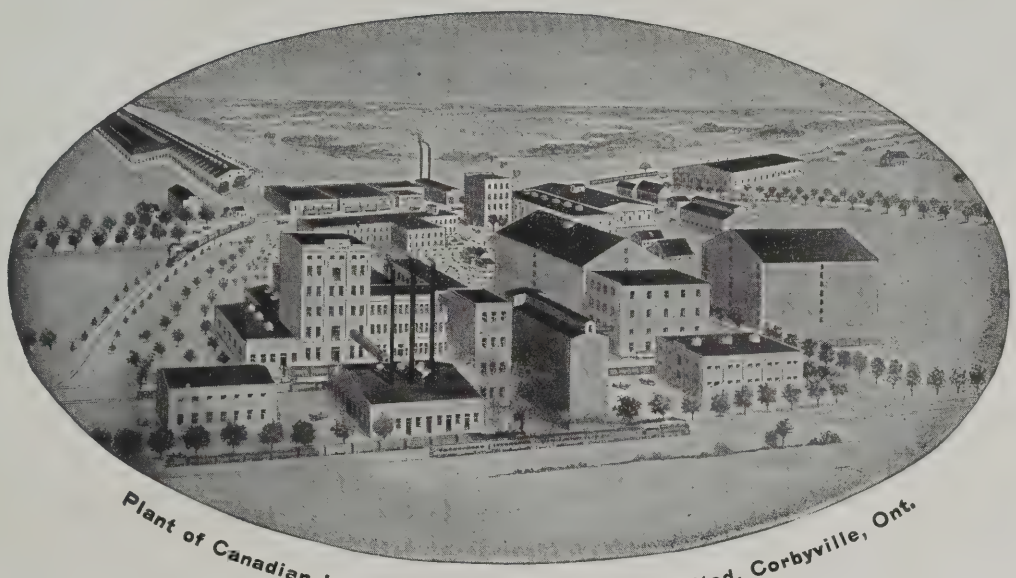
Inefficiency and Waste in Retailing

The greatest cause of inefficiency and waste in retailing to-day is the sham hide-and-seek competition consisting of selling a few well-known articles at a low price and recouping by selling hundreds of less well-known items at good profits. Through this policy consumers are switched from one store to another, and half a dozen stores are permitted to exist where one would suffice, and prices are made high by the duplication of overhead expenses.

The efficient and economical purveying of family supplies is a highly technical business requiring a thorough knowledge of a thousand different articles, the ability to judge of them regardless of brands and trademarks, and such familiarity with values and sources of supply as no hired manager is likely to have. Again, the paternalistic attitude of the industrial store is such as often to breed suspicion on the part of employees, and the store is without the spirit of aggressive enterprise which in privately owned stores attracts and holds trade and makes for large volume of sales.

This false assumption that the sale of goods at, or even below, going prices is sure to create a surplus with which to meet the cost of experiments and mistakes in buying, and

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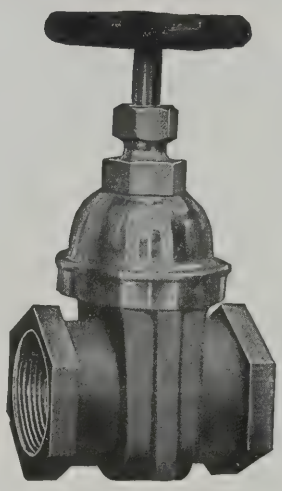
We make a special feature of contracting for the requirements of manufacturers for the year or season, thus providing not only a uniform cost but also a steady supply as needed.

Those who are using Duty Paid Alcohol in their manufacturing processes would do well to consult us with a view to using it "In Bond," thus avoiding the use of two-year-old Alcohol. Under the rules and regulations of the Department of Inland Revenue, newly made Alcohol may be used "In Bond." This Alcohol is much cheaper than two-year-old.

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management is at the bottom of thousands of failures of store enterprises of well-intentioned groups or companies. The failure of the undertaking is made more probable by the further fact that employees expecting immediate benefits, are in no frame of mind to overlook apparent occasional overcharges or other things they think faulty.

The employees, on their part, have often undertaken something resembling Rochdale co-operation, but up to this time, this character of store has not been any more successful than the company store. The co-operative spirit among consumers has not reached this side of the Atlantic so as to enable working people to make the immense savings which 15 or 20 million British workmen are enjoying.

And yet, one who studies the situation can hardly relinquish the thought that in some way a large part of the expense of retailing and wholesaling should be saved to working people who are in a position collectively to buy large quantities.

Gross Profits of Retailers of Food

The Harvard Graduate School of Business finds that the gross profits of retailers of food range all the way from 14.6 to 27.9 per cent. on selling prices, and that the gross profits of wholesalers range from 7.7 to 17.2 per cent. If we were to assume that some of the goods which are sold at the highest retail profit also pay the highest wholesale profit, the gross tax on the consumer under these most disadvantageous conditions would be 45.1 per cent.

But if the dealers, retailing at 14.6 per cent., buy of the wholesalers who only get 7.7 per cent., the consumer bears a total gross profit burden of only 22.3 per cent., or less than half the higher expense of distribution. To be sure, this retailer getting 27.9 per cent. may give more service, such as delivery, and the like, than does the low-profit dealer. But it is not optional with the working man to forego this service and get a lower price at these particular stores, for the prices are usually uniform to all, with or without service. So it may happen that some working men are paying 45.1 per cent. on the retail price for bringing their foods from primary markets, while others are paying only 22.3 per cent.

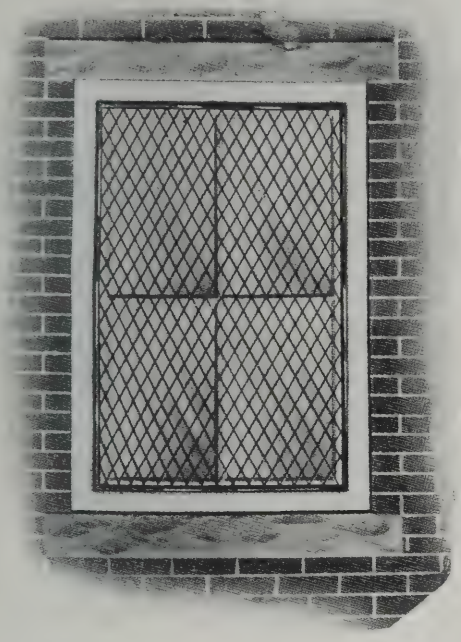
Perhaps it would be fair to say that of all family supplies, including foods, the amount paid by the workman-consumer for both wholesale and retail merchandising would range from 30 to 40 per cent. of the retail price. When it is remembered that something like two-thirds of the workmen's wages are paid for such supplies, it would seem that the task of reducing the cost of distribution should not be given up until the utmost efforts have been made.

Make Purveying of Food to Employees a Concession

The writer wishes to recommend a plan which he believes will go a long way toward solving the problem. This plan consists simply of treating the business of purveying foods to the employees as a concession, and leasing the privilege to the competent and resourceful dealer who would perform the service under proper stipulations at the lowest average gross profit between the quotations in primary markets and the retail price. The successful bidder should comply with clearly stated conditions as to the service he is to perform, and his books should be carefully audited under the supervision of a committee of employees and employer, say, monthly or quarterly to see that such prices were charged as would average only the gross profit stipulated.

Bidders should be large enough dealers to perform practically their own jobbing service as well as retailing, know goods, values and sources. Prices should be at the counter and not delivered to the homes, a separate charge being made for delivery.

Industrial companies should give free store rent and perhaps even a bonus in order that the retail prices made possible



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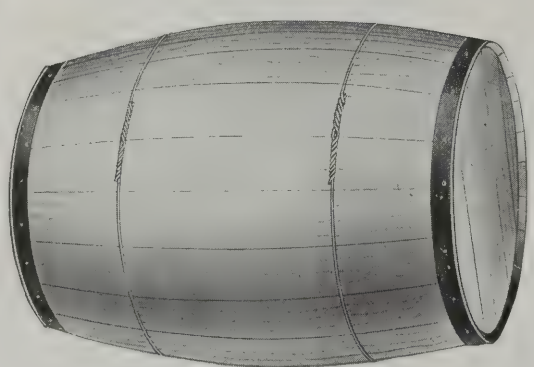
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by such an arrangement would be enough lower than prices current in competing stores to insure practically the whole trade of the employees. This is very essential for, to insure the lowest bid of responsible dealers, they must be assured a large minimum trade. Conditions should be such as to make the concession attractive to responsible bidders, and to insure real competition between bidders.

Verified reports of the auditing committee should be made easily accessible to all customers, the figures being given in the simplest possible manner. Of course, it should be made clear that the employer company makes no profit, but fosters the undertaking as further compensation for its employees.

The report of the bureaus of labor statistics of some states seem to indicate that the prices in some communities are such that consumers must pay double the gross profit that they pay in other communities.

Probable Saving to Employees

It is very probable that this arrangement would enable the employees to buy their supplies from 10 to 15 per cent. lower than they could otherwise get them, and be assured of a quality and purity which would be unobtainable without the kind of supervision which an auditing and inspection committee of the employers and employees could insure. It will be noted that this plan keeps the operation of merchandizing in the hands of trained and experienced merchandizers, thoroughly posted as to qualities, values, sources, and leaves the incentive of a small net profit on the gross turnover to give life and push to the business. The fact is that a large dealer in foods would be satisfied with a net profit of far less than the waste due to weak and inefficient merchandizing. A certain large market known to the writer, doing over 10 millions a year, is conducted at a net profit of not exceeding 2½ per cent. When prices yield more than that percentage they are reduced.

This plan would result in real competition, and in the adoption of economical methods and devices like the self-service or groceteria idea, and would cut out the expenses which are incurred, not to serve the consumer, but to beat competition and profit the dealer.

Of course, a responsible organization of employees would be very desirable, if not almost necessary; and, in fact, the right kind of an organization of employees could take the whole initiative of letting the contract. The furnishing of store room and facilities on the part of the company should be frankly treated as a part compensation to working men, and not as a philanthropic gift handed down in a paternalistic way. Such an arrangement could hardly fail to promote a feeling of responsibility and independence among employees and make for reduction of labor turnover.*

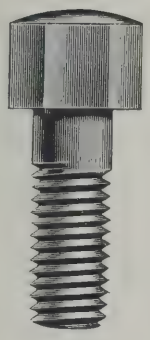
* Since this article was written the writer has learned that two stores of the American Smelting & Refining Co. at Garfield, Utah, and El Paso, Texas, are conducted on this plan so far as restricting the gross profits of the dealers.

Another Branch Plant

United States Chemical Industry Will Locate a Canadian Plant in Walkerton, Ont.

The Kamovar Chemical Co., of Cleveland, Ohio, have decided to establish a Canadian company, and will make their headquarters in Walkerton. Their factory, in which they will manufacture toilet articles, will be located in the Sinclair Block, next to the Rattan Factory. The new industry, in which some local capital will be placed, will eventually employ about 200 hands, and it is expected that operations will start about the middle of November.

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The initial expense is a mere trifle when the amount of protection Eddy's Fire Pails give your plant is considered.

Made of Indurated Fibreware, they're moulded all in one piece, not held together by wires or hoops.

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They're on the job twenty-four hours every day of the year, ever ready for the hurry call.

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BRITISH COLUMBIA'S MINERALS

The mineral production of the province for 1918 was the largest of any previous year with the exception of 1916, when it reached $42,290,462, and when the copper production was the highest on record, being nearly 4,000,000 pounds greater than for 1918.

By E. A. Haggen.

(From the "Vancouver Province.")

The annual report of the Minister of Mines for British Columbia for 1918 has been issued, and is one of the best yet published. Its value lies mainly in the fact that it represents the first complete year's work by the resident engineers of the mineral survey districts. Comparative figures of mineral production for years 1917 and 1918 are:

	1917.		1918.	
	Quantity.	Value.	Quantity.	Value.
Gold, placer, oz. ...	24,800	$496,000	16,000	$320,000
Gold, lode, oz.	114,523	2,367,190	164,674	3,403,812
Silver oz.	2,929,216	2,265,749	3,498,172	3,215,870
Lead lb.	37,307,465	2,951,020	43,899,661	2,928,107
Copper, lb.	59,007,565	16,038,256	61,483,754	15,143,449
Zinc lb.	41,848,513	3,166,259	41,772,916	2,899,040
Coal, tons, l'g	2,149,975	7,524,913	2,302,245	11,511,225
Coke, tons, l'g.	159,905	959,430	188,967	1,322,769
Miscellaneous	.....	1,241,575	.....	1,038,202
Totals	.....	$37,010,392	.....	$41,782,474

The mineral production for the year 1918 was the largest of any previous year with the exception of 1916, when it reached $42,290,462, and when the copper production was the highest on record, being nearly 4,000,000 pounds greater than for 1918.

The Coast district made the largest production of any district, with a value of $13,827,663, the Cassiar district ranking next with $9,178,441. The figures for other districts are: East Kootenay, $7,259,897; West Kootenay, $6,113,279; Boundary-Yale, $4,961,452; Cariboo, $383,996; Lillooet, $57,746.

The coal mines of Vancouver Island and the copper production of the Britannia mainly account for the excellent figures for the Coast district, but the figures for coal do not represent an increase of tonnage so much as the increase in price, amounting to nearly 50 per cent. over the average of previous years. The Cassiar production mainly comes from the Granby Company's Hidden Creek mine, and the Belmont Surf Inlet gold mine, on Princess Royal Island.

District Production

It is noteworthy that East Kootenay is now a larger producer than West Kootenay, this result being mainly due to the Crow's Nest Pass coal production and the development of the Sullivan mine as the world's largest silver-lead-zinc mine.

The Boundary district, which used to lead by long odds, has now dropped to fifth place, owing to the Canada Copper Corporation closing down its Greenwood mines, and the Granby Company's Phoenix mines approaching exhaustion. The principal producer in that district after the closing down of

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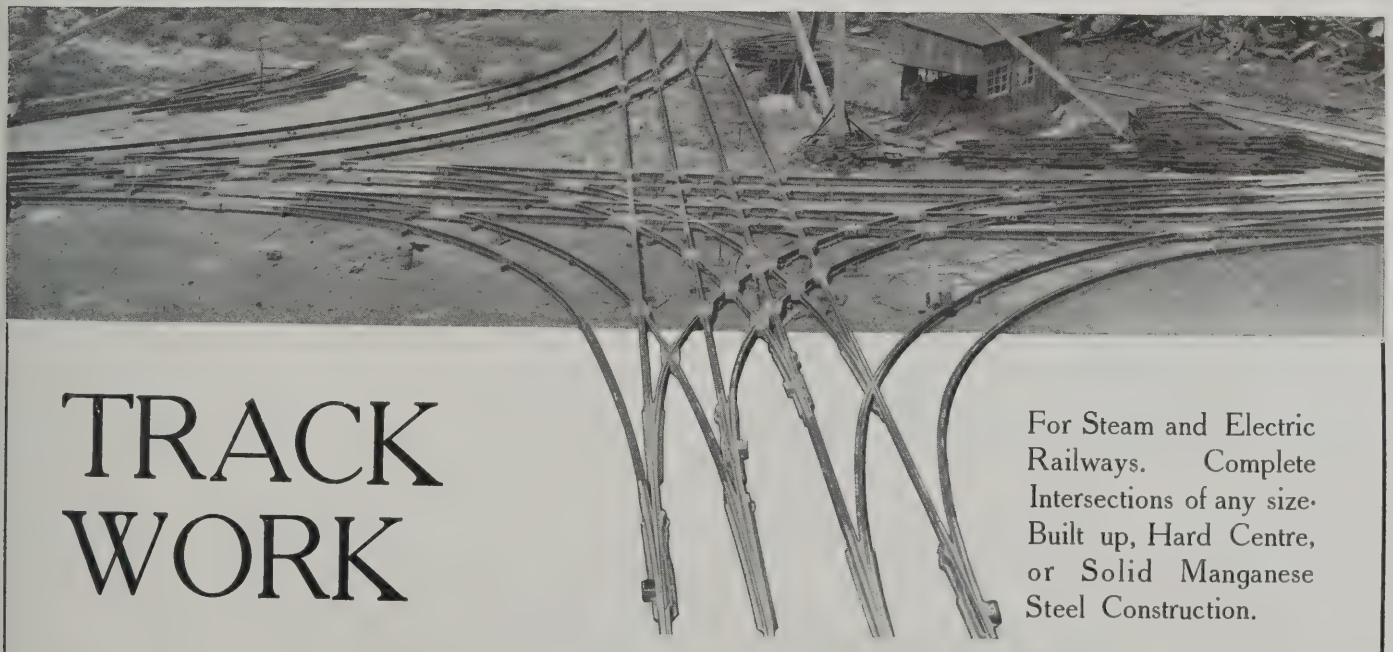
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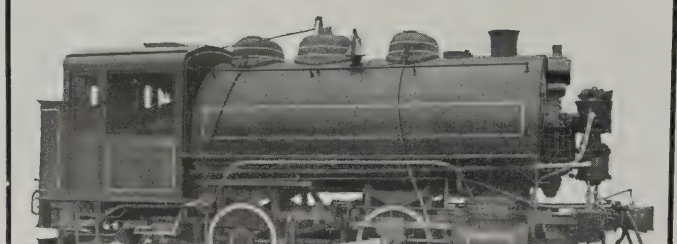
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Phoenix will be the Hedley Gold Mining Company's Nickel Plate mine, whose output averages about $750,000 a year.

The placer gold production for 1918 was the lowest in sixty years, and shows how this once prominent source of gold production is steadily disappearing. Ninety per cent. of the placer gold production is derived from hydraulic mining.

The increase in lode gold was due to the Surf Inlet mine being brought into production with an output of around $1,000,000 a year. Rossland produced about 10,000 oz. more than in 1917; the Coast district about 1,800 oz. more, due to the greater production at the Britannia mine; and Nelson district showed an increase of 4,600 oz., due to the increased production of the Yankee Girl mine at Ymir.

Silver Output

Slocan was the largest producer of silver, accounting for 1,873,236 oz. of the total production of 3,498,172 oz. Skeena mining division ranked second, with 416,616 oz., almost entirely as a by-product from the ores treated at the Granby Company's smelter at Anyox. Other districts produced as follows: Fort Steele, 261,497 oz.; Ainsworth, 228,699 oz.; Boundary-Yale, 228,561 oz.; Nelson, 136,738 oz.; Southern Coast, 116,425 oz.; Windermere-Golden, 91,784 oz.; Omineca, 84,125 oz.; Trail, 47,203 oz.

The Slocan production exceeded that of the previous year by 325,660 ounces, the largest produced being the Surprise, followed by the Queen Bess and Standard. Half of the production of the Boundary district came from the Granby Company's Phoenix mines, other producers being the Mother Lode mine of the Canada Copper Corporation, the Sally and the Union.

The production of the southern coast district was mainly from the Britannia mine, and from the Omineca, from the Silver Standard mine at Hazelton. About three-fourths of the silver production is derived from the silver-lead mines, and the balance as a by-product of copper ores.

The lead production was greater than 1917 by 6,592,196 pounds, but owing to the lower prices realized, $22,913 less The producing districts were, in order of quantity: Fort Steele, 18,695,565; Slocan, 14,575,379; Ainsworth, 6,106,262: Windermere-Golden, 2,659,210; Nelson, 1,611,166.

Of the Fort Steele production, 860,000 pounds came from the North Star, and the balance, nearly all, from the Sullivan mine. The Queen Bess was the heaviest producer in the Slocan, and was followed by the Surprise, Van Roi, Galena Farm and Standard. In Ainsworth mining division the Florence was the largest producer, with an output of 2,500,000 pounds, followed by the Blue Bell with about 1,300,000 pounds; Highland and Cork-Province with about 600,000 pounds each.

The production of Nelson mining division was almost entirely from the Emerald mine. In the Windermere-Golden section the Paradise mine produced about 1,800,000 pounds of lead, and the Couverapee, at Field, about 800,000 pounds.

Copper is King

Since 1905, copper has been the principal metal produced, and for the past few years its production has exceeded that of all the other metals put together. The production for 1918 was the largest on record with the exception of 1916. The production for 1918 was 2,476,189 pounds more than for the previous year, but owing to the drop in price it was valued at $894,807 less. Skeena mining division produced 30,190,606 pounds, nearly half of the total output of copper, this being from the Granby Company's Hidden Creek mine. Other districts produced as folows:

Southern Coast, 18,475,013 pounds; Boundary-Yale, 9,940,125 pounds; Trail, 1,654,356 pounds; Omineca, 643,843 pounds. The production of the Southern Coast was mainly from the Britannia mine, with 17,548,127 pounds, an increase of 1,767,297 pounds over the previous year. The Marble Bay mine pro-

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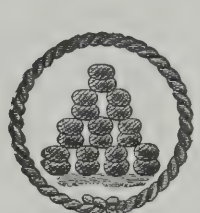
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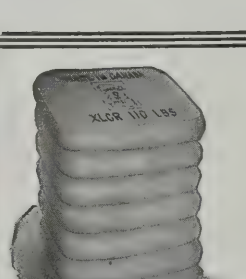
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duced 624,442 pounds. The Boundary-Yale production was mainly from the Granby Company's Phoenix mines, which accounted for 7,347,273 pounds, or double that of previous years. Canada Copper Corporation produced 1,832,382 pounds. For years the Boundary district was the principal producer, but with the closing down of the Greenwood and Grand Forks smelters its days of mining prosperity have passed for the present. It is worthy of note that eighty per cent. of the copper production is now from Coast mines.

Zinc Production

The production of zinc was 75,597 pounds less than for previous year. Fort Steele produced about two-thirds of the total, the figures for the various districts being: Fort Steele, 26,704,806 pounds; Slocan, 14,107,682 pounds; Ainsworth, 640,991 pounds; Omineca, 313,112 pounds. The Fort Steele production was entirely from the Sullivan mine. The Standard was the heaviest shipper in Slocan with a production of 7,000,000 pounds, which, however, was 3,000,000 pounds less than previous year. The next largest producers were the Surprise, Lucky Jim and Galena Farm. Ainsworth produced only two-thirds the amount of previous year. The Omineca production came from the Silver Standard mine at Hazelton.

Iron—Bog iron ore was shipped from Mons on the P. G. E. Railway, to the Irondale plant at Washington, and averaged 40 to 50 per cent. iron, but was high in phosphorus. Magnetite ore was shipped from Texada Island.

Arsenic—The arsenic production was doubled from $20,000 in 1917, to $40,000 in 1918, being entirely the output of the Nickel Plate mine at Hedley, and treated at Tacoma smelter.

Molybdenite—The only shippers were the Hazelton View, at Hazelton, which shipped a carload of ore to Ottawa, and the Golconda, in Osoyoos mining division.

Chromite—Eight hundred tons of chromite were shipped from the Mastodon claim at Grand Forks, and a deposit opened at Scottie Creek, near Clinton.

Manganese—The Curle mine at Kaslo shipped fifteen carloads of manganese ore, and large deposits of high-grade ore were discovered at Cowichan Lake.

Fluorspar—A total of 100 tons were shipped from the Rock Candy mine at Grand Forks mining division, this mineral being used by the Trail smelter in the manufacture of hydrofluoric acid, used in the lead refinery.

Epsom Salts—Epsom salts were shipped from Spotted Lake, Osoyoos mining division, and 170 tons from Clinton.

The 1918 Coal Figures

The coal production was 180,009 tons over the previous year, and was the largest production since 1912. A total of 276,479 tons were made into coke. Vancouver Island was the largest producer, with 1,666,211 tons. Crow's Nest produced 732,864 tons; Nicola-Similkameen, 179,179 tons, and Omineca 470 tons. The Canadian Collieries, Limited, was the largest producer, mining 30.7 per cent. of the total. The Canadian Western Fuel Company was the second largest producer, with 28.4 per cent. of the total. The Crow's Nest Pass Coal Company mined 23.6 per cent. of the total. The following was the production of the various collieries:

	Tons.
Canadian Collieries	791,830
Canadian Western Fuel Co.	731,922
Crow's Nest Pass Coal Co.	608,875
Corbin Coal and Coke Co.	123,989
Middlesboro Collieries, Limited	101,559
Pacific Coast Coal Mines	82,629
Nanoose Collieries, Limited	28,804
Fleming Coal Co., Limited	33,203
Granby Consolidated M. S. & P.	16,958
Princeton Coal and Land Co.	38,673
B. C. Coal Mining Co.	14,068
Coalmont Collieries, Limited	5,744
Telkwa Collieries, Limited	470

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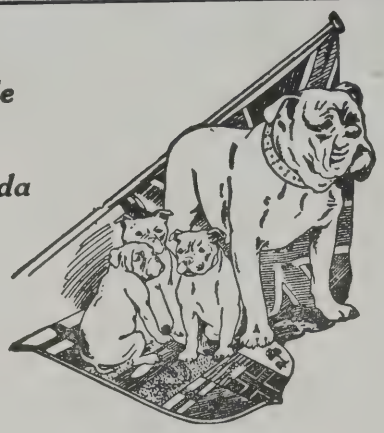
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The year added two new collieries to the list of producers, namely, the Granby Company's mine at Cassidy, and the Telkwa Mine at Telkwa. Of the production of the coast collieries, amounting to 1,845,860 tons, 933,296 tons, or nearly half, were sold to local markets, and 469,020 tons exported. The local consumption showed an increase of 8.3 per cent. probably due to the substitution of coal for fuel oil in heating plants. In the Crow's Nest Mines, on the other hand, 80 per cent. of the output is exported ot the United States.

The coke production was 29,062 tons more than for the previous year. Of the coke output, 24,887 tons was from the ovens of the Canadian Collieries, Limited, at Union Bay, and 164,080 tons from the coking plants of the Crow's Nest Pass Coal Co. The whole of the coke was sold to the local smelters and foundries, the output of the Canadian Collieries being taken by the Granby Company for its Anyox smelter. Now that this company is mining its own coal and has a by-product coking plant in operation at Anyox, it is probable the Union Bay coke ovens will again be closed down until the Ladysmith Smelter reopens. This will leave all the more coal available to meet the home demand for fuel.

Building Materials

The demand for building materials was the lowest for some years. The Clayburn Company was the principal manufacturer of clay products, the output of which amounted to about $250,000. Lime production for building and fertilizer purposes fell from $102,223 in 1917, to $28,536 for last year. On the other hand, quarried for smelter flux represented a value of $100,000, used in the furnaces of the Granby and Consolidated Mining and Smelting companies. Cement was manufactured to the value of about $300,000, by the Vancouver Portland Cement Company, Limited, at Tod Inlet.

Shipping Mines

There were 175 shipping mines on the list for 1918, and these produced 2,892,849 tons of ore, or about 130,000 tons more than for 1917, though the production was about 300,000 tons less than for 1916.

The number of men employed in the metal mines was 4,148, and in the coal mines 5,427. The tonnage of coal produced per man in the Coast coal mines was 649, and in the Crow's Nest mines 900 tons.

A notable improvement in mine labor conditions is the reduction in accidents in the coal mines, the ratio of accidents last year being the lowest in ten years.

Launch Large Tonnage

Launchings in British Columbia this Year will Exceed Last Year

For the first half of 1919, 28 ships were launched in British Columbia, with a total tonnage of 75,500 tons. Of the launchings, two were 8,800-ton steel vessels from the Coughlan yards, Vancouver; two 4,300-ton steel vessels from the Wallace yards, North Vancouver; 7 wooden vessels from the Lyall yards, North Vancouver, and 8 of the 3,000-ton wooden steamers from the Foundation yards, Victoria, in addition to the completion of the contract at the latter's yards in launching all the 1,500-ton class boats. Other companies launching 1,500-ton wooden steamers were the New Westminster, Pacific Construction Co., Northern Construction Co., and the Cholberg yards. It is expected that the total tonnage launched during the year will exceed 165,000 tons, as compared with 155,600 in 1918.



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NEW SOURCES OF LEATHER SUPPLY

How the shortage of supply of hides of land animals may be made up by having recourse to the skins of sea creatures. The most significant development in the art of converting the skins of aquatic animals into leathers of excellent grades is that now being pursued in dealing with the hides of sharks, rays, dogfish, etc.

By Robert G. Skerrett.

(From the "Scientific American.")

Heretofore, with minor exceptions, we have depended upon the skins and hides of land animals for the great bulk of our leather stocks. To-day, because of the reflexes of the war, and owing to diminished if not totally destroyed herds of cattle, sheep, goats, etc., we, with other peoples, are face to face with an unprecedented shortage of leathers. And, what is equally disquieting, this scarcity is going to lay a tax upon all of us.

The pinch upon our purses will come home most directly through the added prices that are certainly going to be charged for our footwear next fall and winter. The average pair of shoes will cost us something like a dollar more if the experts of the leather industry be correct in their prophecy. That is to say, the nation as a whole will have to hand out for its boots and shoes a matter of $100,000,000 additional to cover its feet in the course of the next six months without gaining anything in the way of improved articles.

We are accustomed to boast of our self-sufficiency when it comes to raw materials, especially. It will, therefore, probably shock many good Americans to learn that the United States commonly relies upon the outside world for nearly half of its cattle hides, for well-nigh all of its goat skins, and likewise for a very large part of the pelts of sheep and calves consumed here. From an industrial point of view, the present leather shortage and outlook become even more serious when we recognize the fact that we have grown to be the leading nation among those manufacturing boots and shoes. What are we going to do to make up the existing scarcity and to insure our factories against shut-down or woefully diminished output?

Many Uses for Leather

During 1917 we imported 700,000,000 pounds of hides and skins, valued at the ports of entry at $216,000,000. Since then, there has been a notable decrease in the quantities of leather stocks brought into the United States, and this falling off has reached hundreds of millions of pounds. Only a part of the leather worked up here annually goes into footwear. Much of it is demanded by the upholsterer; great quantities of it are used in the making of harness and saddlery; the glove trade levies a big toll; and then its employment is varied in the fabrication of travelling bags, handbags, pocket-books, and an endless multiplicity of other useful as well as ornamental articles. In the field of mechanics, leather meets with peculiar fitness numerous needs, and the whirring wheels of our factories and other services calling for power transmission would be at a loss if a sufficiency of leather belting were not available. Finally, the automobile and aircraft have brought to the fore the advantages of leather in providing especially suitable garments.

Manifestly, the demands for leather stocks are certainly going to increase rather than to diminish; and if the herds, the droves, and the flocks of land animals are inadequate, from what other sources can we obtain skins susceptible of being tanned and made fit to meet these manifold services? Happily for us the period of strife has stimulated research and brought about material achievements which otherwise

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might still be remote potentialities. Quite two years ago, the Department of Commerce urged the experts of the leather industry to see what they could do here towards successfully tanning the skins of a number of marine mammals and fish.

Previously, the skins of some domestic porpoises had been tanned but not in sufficient measure to loom at all conspicuous in the volume of the native leather industry. There were two reasons for this. First, the catching of the porpoise was an infrequent occupation and we had little if any trouble in securing from long-established sources the desired amounts of leather stocks; and, next, porpoise leather for boots or shoes found only a limited use owing largely to the fishy odor that clung to the finished product. The more common employment of the leather was in the form of shoestrings. In England, on the other hand, for a good long time, the tanners have been producing a fine grade of so-called porpoise leather from the skin of the beluga or white whale, which attains a length of 18 feet or more and will average in girth from 10 to 12 feet. This leather has great tensile strength and is remarkably well adapted to the making of machinery belts; and because it keeps its shape under varying stresses it is admirable for working into shoes. The beluga abounds in the waters contiguous to the northern coasts of this continent.

A Concern that has Succeeded

The most significant development in the art of converting the skins of aquatic creatures into leathers of excellent grades is that now being pursued upon a commercial scale in dealing with the hides of sharks, rays, dogfish, blackfish, etc. Despite the fact that many firms, encouraged by the United States Department of Commerce, failed to secure satisfactory results, one New York concern has solved the difficulty that has hitherto baffled the tanner. One of the early operations in preparing the skin of the aquatic animal for tanning is that of soaking the hide in a lime solution. If this is not done with extreme care and with due regard to the natural differences peculiar to the fish skin the resultant product is so spongy and lacking in strength that it has practically no market value. This stage of the process has pretty generally ruined the skin and made further work upon it quite useless. To-day, the secret of a correct lime bath has been discovered, and, similarly, some other phases incidental to the manipulation of the skins have been mastered. Among these is a degreasing treatment which effectually removes the fishy odor.

The adaptation of the shark skin to the general purposes of the leather worker has presented distinctive difficulties—so, too, has the skin of the ray and the dogfish—because of the horny, tuberculous exterior which is frequently so hard that it can be ground down only by means of abrasive belts or wheels. In fact, this shagreen has been extensively employed by cabinet-makers, ivory workers, metal workers, etc., in lieu of emery cloth and sand paper. The question of making shark skins available for leather has, therefore, rested in part upon devising ways to get rid of the shagreen. The results as a rule have been anything but satisfactory, simply because grinding away what might be called the superficial hard material still left the supporting parts or bonds imbedded in the leather, to just that extent stiffening it, greatly hampering cutting and sewing, and yielding a product which had numerous drawbacks.

Thanks to recourse to chemistry, the shagreen can be completely separated from the underlying skin and yet leave the hide beautifully marked with its characteristic "grain." So dressed, the leather lends itself to the manufacture of bags, belts, card cases and other articles where an ornamental surface is desired. With this exterior removed, either the upper layer of the skin or the underlying "splits" can be

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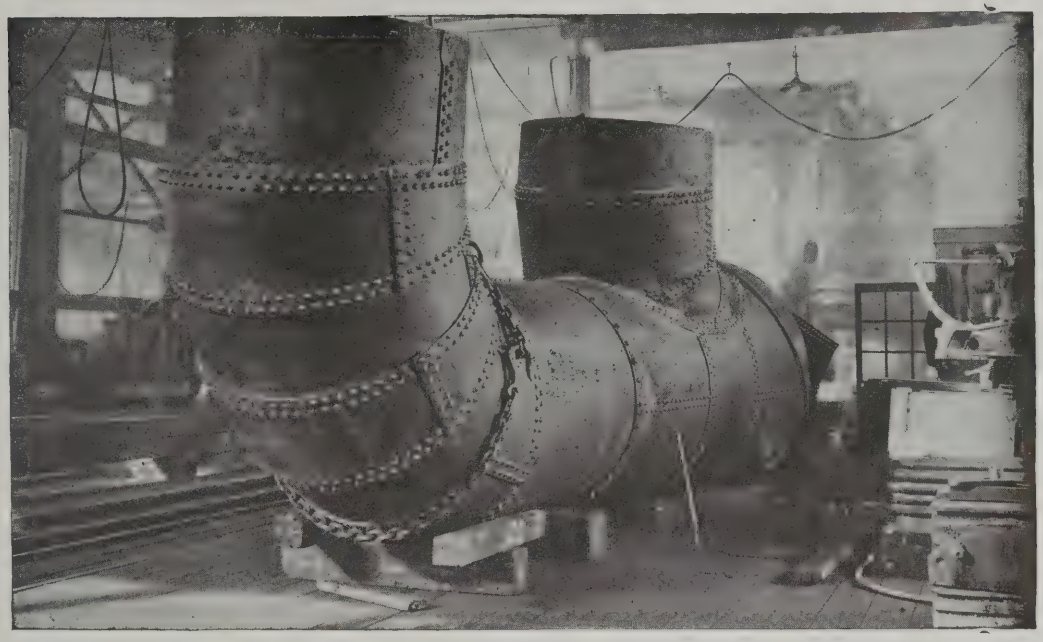
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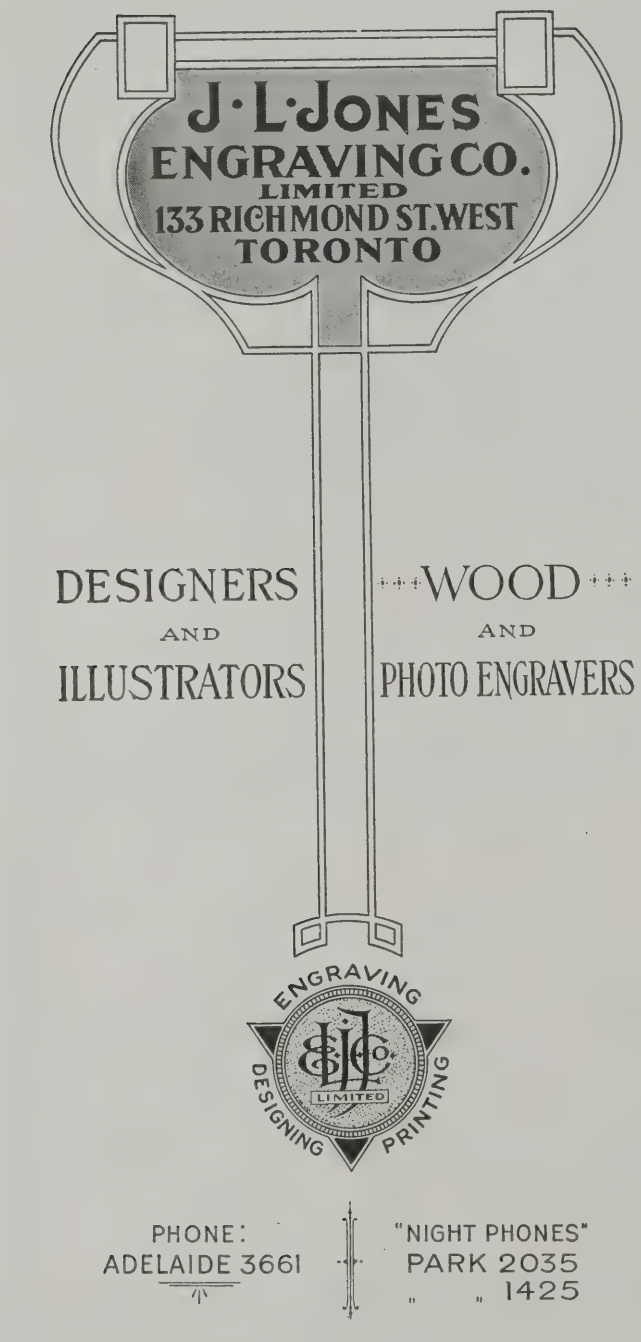
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dressed for shoe stock—including the heavy material for soles. The leather will take a beautiful finish and is notably durable. From a 500-pound shark it is possible to obtain ten square feet of leather from the hide, and the stomach furnishes a raw material that will yield a leather which is soft and strong and looks not unlike glazed kid when ready for the market.

The ray or devil fish will frequently provide a skin, when tanned, having an area of 100 square feet; and the sawfish is also a potentially abundant source of leather stock. The dogfish, being comparatively small, is not as individually profitable as the full-grown shark, and yet its hide is well worth tanning. The porpoise, depending upon its size, will give a skin susceptible of producing anywhere from 10 to 20-odd square feet of leather. Not only that, but from this skin can be taken a sturdy upper layer of grain of very fine quality and then two underlying "splits"—the first of these being thick and strong enough for a good grade of heavy shoes, while the second "split" is of the character of a thick suede. The intestines of the porpoise make leathers for which there are many uses. The skin of the blackfish and likewise the skin and stomach of the whale lend themselves to tanning, and from these several sources leathers of fine qualities can be secured.

Utilization of Other Parts.

But this whole question of "sea leathers" would make but a moderate appeal to enterprise and capital if it were not possible to utilize other parts of these aquatic creatures. From the livers of the shark an oil is obtainable, also from the livers of the dogfish, which is said to have much of the medicinal properties which characterize cod liver oil, and, besides, the oil is in demand for the manufacture of soaps, for mixing paints, and for the treatment of some leathers. A 500-pound shark will give an average of from 10 to 15 gallons of liver oil, which is easily marketable at fifty cents a gallon. The dorsal fins, when dried, bring $2.50 apiece among Oriental epicures. The teeth sell readily for five cents each to manufacturing jewelers who work them into ornaments of one kind or another. The flesh of the shark is said to be decidedly palatable, and the Bureau of Fisheries has published some thirty different recipes for fresh shark, smoked shark, salt shark, and canned shark. In common with the meat of other sea creatures, the flesh of the shark can be converted into fertilizer or dried and ground for chicken and cattle food. As a fertilizer the stuff is rich in ammonia and phosphoric acid. Sharks in our southern waters range from 400 pounds to 2,000 pounds in weight, while the devil fish or ray will frequently tip the scales at 3,000 pounds.

Porpoise Yields Oil

The porpoise, besides furnishing skins that can be tanned, yields three grades of oil—i.e., body, head, and jaw-pan. The latter is especially valuable as a lubricant for watches and other fine mechanisms and, to-day, fetches quite $50 a gallon. Certain parts of the skins of some of these aquatic animals—parts that are not worth tanning—contain fully 90 per cent. of glue. Likewise, from the blood of some of these creatures is to be had the basic material for a superior kind of waterproof glue such, for instance, as is desired in the built-up stock now used in making airplane propellers and other wooden parts of the flying machine. From the intestines that cannot be worked into leather it is possible to get the gut for string instrumens, tennis rackets, etc., and sausage casings, parchment, stopper-covers, glue, and other marketable commodities. The point is, nothing need go to waste; and, at the same time, an inexhaustible source of leather stock is thus made available which heretofore has been almost entirely neglected.

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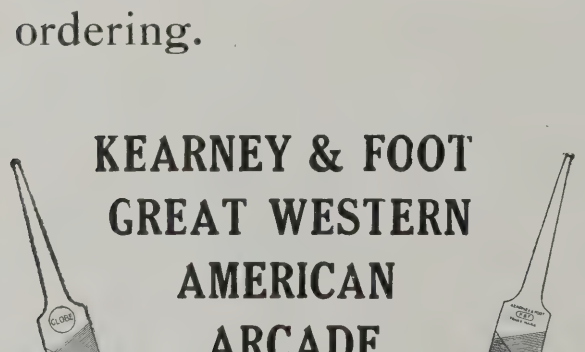
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Among the Industries

Under this heading are published items of news of current interest concerning the activities of Canadian manufacturers. Information about changes of interest, enlargement of plants, and plans for future developments are welcome, and are published free of charge, provided they should not be properly classified as advertisements

ALBERTA.

Redcliff.—Plans are completed for the erection of two large additions to the Dominion Glass Co.'s plant here.

BRITISH COLUMBIA.

Beaver Cove.—An addition is planned to the plant of the Beaver Cove Lumber & Pulp Co.

Collingwood.—Announcement has been definitely made regarding the location of the new rubber plant of the Gregory Tire and Rubber Company, which is to be at Collingwood, near Kingsway. It is expected that the plant will employ approximately 50 men and will have an output of 300 tires and 600 inner tubes per day. The concessions offered by the municipality of South Vancouver were ten years' exemption from taxation and water supplied at cost.

Merritt.—Plans were completed and work commenced recently to establish the Nicola Pine Mills, Ltd., in Merritt. It will be remembered that some months ago the splendid plant and yards of the company at Canford were completely destroyed by fire since which time strenuous efforts have been made by the citizens to have this industry established at Merritt. With this object in view, a joint stock company was formed to purchase the Blair property, situated south of the Coldwater river, between Merritt and Middlesboro, immediately adjoining the city limits.

New Westminster.—The Western Cordage Company has definitely decided to locate a plant in New Westminster, a site having been secured near Sapperton in the industrial area. The machinery has been ordered and when completed the plant will employ eighty to ninety returned men. The industry will be a co-operative concern, organized under the Provincial Government's industrial development scheme.

Port Coquitlam.—Pitt River Shingle Mills plan the erection of a $30,000 mill.

Vancouver.—A $15,000 factory is planned by the Dust Control Co.

A $10,000 factory will be built by the Kennedy Sash and Door Co., Front Street.

A group of local business men, headed by Gordon Jonah, of the Jonah-Piat Co., have formed a company and will erect a woollen mill.

T. H. Laslett will construct a new brick factory at 721 Seymour Street. Estimated cost, $10,000.

A plant which was to have been installed at Vancouver by the Argyll Bute Co., a concern manufacturing "Scotch Snack" products of fish paste, with main plants and offices at Montreal, is to be established at Seattle, according to a statement by W. O. Barber, representative of the company. The site for the plant at Vancouver has been under option and much of the material had been delivered at Vancouver, but work of installation was ordered suspended pending Mr. Barber's trip of inspection to Seattle.

MANITOBA.

Winnipeg.—The Manitoba Bridge & Iron Works are now manufacturing the Anderson grain-saving guards, which, it is claimed, have proven to be very efficient in saving all fallen field crops, including wheat, oats, flax, rye, barley and also timothy and other hay. There are at present over ten thousand sets in use and the sales are increasing.

The Twin City Separator Co., manufacturers of the Bull Dog fanning mills, are at present constructing a three-story brick machine-shop and warehouse building. Manager P. J. Grou states that with recent additions the total floor space of the company will be 124,000 square feet. Their business to date has been the best in the history of the organization, which has shown a record of steady advancement.

The Emerson Manufacturing Company, who have for some time been distributors of the Emerson wild-oats separator, announce that they have taken over the entire production of this separator for the American continent. The Winnipeg concern recently concluded negotiations with W. H. Emerson & Sons, Detroit, Mich., whereby they take over the machinery, plant, goodwill, stock and all assets of the American concern. The factory in Detroit has for sixteen years been supplying farmers and elevators all over the United States with this well known grain cleaner. The Emerson Manufacturing Co., Winnipeg, are at present making large additions to their plant to take care of the expansion. The company will employ about forty hands, which will be added to as production increases.

Additions to their lime plant are being made by the Manitoba Gypsum Co.

The Continental Oil Company, which has operated plants at Winnipeg, Regina, Saskatoon, Calgary, Lethbridge and other Western points, has been taken over by a new firm, the North Star Oil and Refining Company, Limited. The head office will be at Winnipeg.

NEW BRUNSWICK.

Marysville.—Plans of the big dam which is to be constructed on the Nashwaak river, near Marysville, N.B., by the Nashwaak Pulp and Paper Co., of which Hon. N. M. Jones is general manager, have been filed with the Lieut.-Governor of the province in accordance with the provisions of the Act passed at the last session of the New Brunswick legislature. It is understood that the Nashwaak Co. will proceed with the erection of the

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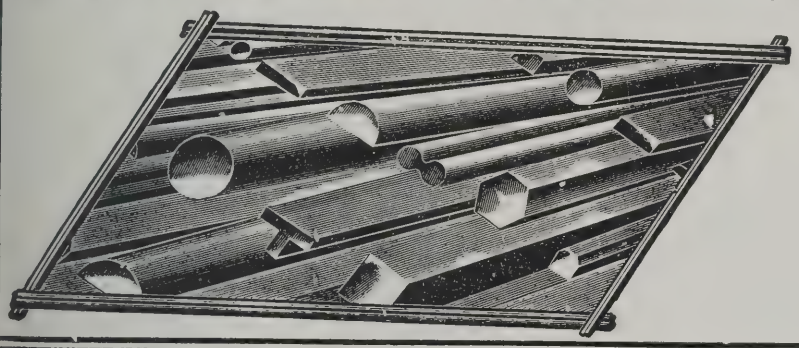
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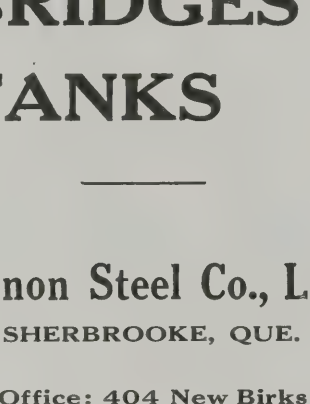
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TORONTO MONTREAL VANCOUVER

big sulphite pulp plant at Marysville in the near future and will eventually remove the present plant from St. John to Marysville.

Mullin's Brook.—The Hardwood Last Block factory, which was spoken of some time ago as about to be located at Mullin's Brook, York County, N.B., is now being built. The site is about four miles from McGiveny Junction on the Canadian National Railway. The interest behind the enterprise is H. Mobbs, of Kettering, England, said to be the largest maker of last blocks in the world. Between one and two hundred persons will be employed to begin with, and the manufacturers have entered into an agreement with the Nashwaak Pulp & Paper Company for 3,000,000 feet of hardwood lumber.

NOVA SCOTIA.

Sydney.—The plant of the Cape Breton Pulp and Paper Co. at St. Ann's, Victoria County, is very busy at the present time and about three hundred men are employed. The company is looking for additional help. A large new barking drum is being installed. Gangs of men are at work taking out large quantities of pulp wood and making roads in order to facilitate the movements of the motor trucks, which will deliver the product to the pulp mill. Shipments of pulp have been made by steamer to several points in the United States, and it is the intention of the directors to erect eventually a paper mill, which will convert the raw material into the finished product.

The Sydney Foundry and Machine Company of Sydney, N.S., who conduct a large repair business in marine lines, are applying for a site upon which to build a dry dock for this port.

ONTARIO.

Arnprior.—The International Button Co. plan the erection of a $25,000 factory.

Belleville.—A proposition to build a large steel plant in Belleville is now under consideration by the Tivani Steel Co., Ltd. The plant would consist of electric furnaces, rolling mills, merchant bar mills and open hearth furnaces. A similar plan is being considered for Vancouver.

Brantford.—C. H. Hyman & Co., London, have let a contract for a $125,000 four-story reinforced concrete canning factory.

The works of the Kerr & Goodwin Machine Company at Brantford are now turning out one of the new Hoag oil engines manufactured by this company every day. There is good prospect of these engines being made on a large scale very shortly.

The Brantford Piano Case Co. contemplate further extensions to their plant.

Additions to two buildings will be made by the Cockshutt Plow Co., Limited, at a cost of $24,500. Additions to plant are also being made by the Brantford Roofing Co.

Alterations and extension to office building are being made by the Dominion Steel Products Co., Limited.

The Robbins & Myers Co., of Springfield, Ohio, will erect a factory here.

The United Portland Cement Co., Limited, propose to erect a factory at Lafayette, Ont.

Contracts have been let for addition to factory and dry house of the Slingsby Mfg. Co., Limited, and to the factory of the Brantford Computing Scale Co., Limited.

Brockville.—The Brockville Paper Manufacturing Co. will erect a three-story factory on Park Street. Estimated cost approximately $100,000.

A smelter may be built here by the Consolidated Iron and Steel Corporation, Limited, 20 King St. East, Toronto, recently incorporated with a capital of $8,000,000, and backed by Toronto and Detroit interests.

Cargill.—The woodworking plant of Cargill, Limited, is shut down, due to the shortage of skilled operators. They expect to resume production about the first of the year.

Chatham.—A new three-story brick factory building will be erected immediately by the Gray-Dort Motor Sales Co.

Cobourg.—The Crossen Car Co., Limited, who formerly manufactured a line of sleeping, parlor and passenger cars, etc., have discontinued business. The plant has been completely dismantled.

Collingwood.—An amalgamation has been made with the Collingwood, Ont., steel plant and the Canadian Western Steel Co., Ltd., with rolling mills at two Western points. The new firm has been incorporated in the name of the Canadian Western Steel Corporation, Limited, and it is proposed to start the idle rolling mills at Collingwood and also start up the open hearth furnaces. Construction will begin within a few weeks. This new corporation will have in operation before long three rolling mills, located at Collingwood, Ont., Medicine Hat and Redcliff, Alberta, also a bolt and nut factory at Medicine Hat, which it is said, will enable them to supply the trade, both East and West.

Cornwall.—The Firestone Tire & Rubber Co., Akron, Ohio, may erect a Canadian branch here.

Fort William.—The Kakabeka Falls Brewing Co., are extending their present buildings to accommodate an additional bottling plant.

Galt.—It is stated that a tin smelting plant is to be located at Galt. The idea is to build one smelter to begin with, to be followed by others as the need arises.

The plant of the Victoria Wheel Works is being equipped to manufacture shafts, poles, and all bent goods required for carriage making.

Goderich.—The Convertible Tractor Corporation of St. Paul, Minn., may erect a Canadian branch at Goderich.

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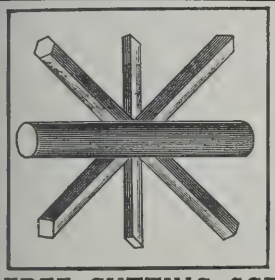


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CANADIAN

Guelph.—The International Malleable Iron Company of Guelph have called for tenders for the construction of a new machine shop and warehouse. The building will be one story in height and will be 189 feet by 120 feet, of concrete and brick, and will cost about $33,000.

The Fried Grills Hat Co. will erect a large addition to their present building, Suffolk Street, to be completed by early spring.

Among recent building permits at Guelph was one for $45,000 for addition to the Partridge Rubber Co.'s factory and one for $100,000 for the new factory of the Northern Rubber Co.

Hamilton.—Tenders will be opened on September 15 for the erection of the $600,000 plant to be erected here by Porritts & Spencer, Limited, Bury, England.

The Dominion Canners have purchased new office premises in Hamilton. They have bought the old Bell Telephone building on Hughson Street, the price being reported to be over $50,000. Their present offices are in the Landed Banking and Loan Building.

It is stated that plans have been prepared for a five-story tailoring establishment to be erected on Hughson Street.

The Beaver Motor Truck Company, capitalized at $350,000, have decided to locate in Hamilton. A light two-ton truck will be turned out.

Contracts have been let for a $16,000 warehouse for Canadian Cotton Co.; a $10,000 boiler house for Chipman Holton Knitting Co., and $10,000 warehouse for Canadian Steel & Wire Goods Co.

Kapuskasing.—It is expected that work will shortly be started on the new pulp and paper mill of the Spruce Falls Pulp & Paper Co., which will be erected at Kapuskasing, Ont. The capacity of the plant will be 200 tons a day, and the general contractors for the work and large dam which will be built on the river at this point are Morrow & Beatty, Limited, of Peterboro.

Kitchener.—The F. W. D. Auto Co. will commence construction of their new factory immediately.

The Komavar Chemical Co., Cleveland, Ohio, contemplate establishing a Canadian factory. It is stated that a site may be chosen in Kitchener or in London.

The Berlin Engine and Thresher Company, Limited, has changed its name to the Tuerk Engine and Tool Co., Limited.

A contract has been awarded by the A. & C. Boehmer Box Co. for the erection of an addition to their factory.

London.—General contract has been let by C. S. Hyman & Co., Limited, for a $300,000 addition to tannery.

Work will be commenced shortly on the Canadian branch factory of the Republic Motor Truck Co. The Canadian company is capitalized at $2,000,000.

The London Concrete Machinery Co. is building a $5,000 addition to its factory.

Merrickville.—The Percival Plow and Stove Co., Limited, are negotiating with the council for land on which to erect a new moulding shop and machine shop.

Morrisburg.—Handley-Page, Ltd., have secured a Dominion charter to engage in a general aeroplane business in Canada. The capital stock will be $2,500,000, and the head offices of the company will be at Morrisburg, Ont. The directors named are William Harold and Admiral Mark Kerr, London, Eng.; Harry Clark, Montreal; Fred. Chalmers and W. H. Gannon, of Morrisburg.

Niagara Falls.—A contract has been let for a factory for the Niagara Wire Weaving Co.

A factory is being erected by the Spring Water Bottling Co. Ferry Street.

Oshawa.—Contract has been let for a factory building to cost $100,000 by the Gananoque Spring & Axle Co.

The General Motors of Canada, Ltd., have announced part of their extension policy. A new four-story plant, 400 feet x 80 feet, will be erected to assemble Oldsmobiles and trucks. A central shipping building, 200 feet x 80 feet, with a capacity of fifty-six freight cars under roof, will be erected, so that inclement weather will not handicap shipping operations. An enamelling plant, 300 feet x 80 feet, three storeys, equipped with the most modern facilities for efficiency and mammoth production, will also be erected.

Port Colborne.—The Canada Cement Co. have let contracts for a potash recovery plant to cost $150,000.

Preston.—A new factory will be erected here by Otto Homuth, manufacturer of woolstock.

St. Thomas.—The F. J. Harding Co. are reported to be contemplating additions to their plant.

Sandwich.—A Detroit company manufacturing clutches for automobiles, trucks and tractors, has secured a site here and proposes to erect a branch plant, though building operations will not be commenced until next year.

Sault Ste. Marie.—The Algoma Steel Co. will spend several hundred thousand dollars in making extensions to their mills to enable them to manufacture structural steel up to 32 inches.

Stratford.—The Kalbfleish Planing Mill, who have been for many years in the woodworking and retail lumber line, have recently branched out and added a new department in the manufacture of bodies for motor hearses, ambulances, coupes, limousines and other equipages.

Strathroy.—The Dominion Canners, Limited, have let the contract for a $60,000 plant here.

Toronto.—The new steel rolling mill which will be erected on the old British Forgings site, Ashbridge's Bay, Toronto, by Baldwins, Limited, of Swansea, Wales, will be known as Baldwin's Canadian Steel Corporation. A. M. Russell, of Hugh Russell & Sons, Montreal, will be president of the company which will employ about 2,300 men within a year.

An addition costing about $16,000 will be made to the factory of J. J. McLaughlin, Limited, manufacturers of bottling and ice-cream machinery, etc.

A $60,000 factory building is being erected by Jos. Simpson & Sons, Limited, manufacturers of underwear and knitted goods.

A new suspender plant is to be erected on Spadina Avenue between Adelaide and Richmond Streets at an estimated cost of $135,000. Mr. Henry Greisman, head of the King Suspender Company, is the interested party. The building will be of mill construction and six stories high.

Possibly the only exclusive Canadian textile soap factory has been opened up in Toronto by the Standard Soap Company.



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Underwear, Hosiery and Sweaters
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ROCK ISLAND, QUE.

Limited, who secured in May a modern factory at 40 Dovercourt Road, and are now manufacturing a full line of all kinds of textile soaps. Mr. H. M. Marshack, who is the part owner and manager of the new company, has had a lifelong experience in the textile soap manufacturing. Prior to coming to Canada he was for ten years associated with the Fiske Manufacturing Co., of Springfield, Mass. A number of the Canadian textile mills are already using the product of the new factory, which has a present capacity of two and a half million pounds a year, with room for enlargement if necessary.

Work has started rebuilding factory for Granite Concrete Block Co., Limited, 832 Weston Road.

An addition will be made to the foundry of the Wm. & J. G. Greey Co., 16 Church Street.

A tannery building will be erected by H. B. Johnston & Co., 774 Dundas St. East.

Canadian Tank and Pump Company, Limited, capital $50,000, head office, Toronto, Ont., plans to manufacture and deal in self-measuring oil pumps, tanks and storage systems.

Wallaceburg.—A small extension is being made to the plant of the Dominion Glass Co.

Windsor.—It has been announced that the Fisher Body Company, of Detroit, will shortly erect a five-story factory for the manufacture of closed automobile bodies at Windsor, which, when completed, will provide employment for about 200 men. This company is already operating a plant at Walkerville, where open automobile bodies are being manufactured.

The ratepayers have voted against the proposed by-law granting certain concessions to the Lamb Railway Service Co., including two-thirds of an acre in the factory district, in return for construction of a $10,000 factory.

Woodstock.—The Canadian Linderman Company of this city is about to resume manufacturing operations on a very extensive scale. The local plant was visited recently by representatives of the American Linderman Company, and they announce that, beginning this month, they will start manufacturing in the local plant, which has been undergoing extensive repairs of late, a unit electric lighting and power system, on which it is understood the company has purchased full patent rights. When the plant gets running steadily many men will be employed. During the war the company was manufacturing shells.

QUEBEC.

Longue Pointe.—General contract has been let for two factory buildings for the Montreal Locomotive Works, Limited.

Cap de la Madeleine.—Plans are being prepared for $50,000 extension to machine shop for Tidewater Shipbuilders, Limited.

Montreal.—Plans and specifications have been prepared for a factory for the Smardon Shoe Co., Limited, 533 Visitation Street.

Contracts have been let for a $60,000 addition to the factory of the McFarlane Shoe Co., Limited, 61 De Normanville Street.

Contracts have been let for four buildings at a cost of $455,000 by the National Breweries, Limited. A $44,000 factory will also be erected by the United Shoe Machinery Co.

Quebec.—The Rock City Tobacco Co. are making a $20,000 addition to their factory.

It is reported that an option has been taken upon property situated around Sillery Cove for its eventual purchase for the erection of a nine-million-dollar pulp mill. The promoters are well-known American financiers and practical pulp mill men.

Rigaud.—Burnett and Crampton are planning a new foundry capable of turning out 250 tons of castings a month. They will install molding machines and equipment of the most modern type for producing machinery castings, mill and mining equipment and general castings.

St. John's.—Belding-Paul-Corticelli, Limited, have awarded a contract to Anglin-Norcross, Limited, for the erection of a dye house. Cost of construction will be about $75,000.

Three Rivers.—It is announced that work will start at once for sulphite mill, grinding mill and three workshops costing $500,000 for the International Paper Co.

An extension is being made to the office of the Three Rivers Shipyard Co.

Plans are in preparation for the erection of an $8,000 factory for the Frisco Bottling Works Co.

Canada Iron Foundries, Limited, are erecting an $18,000 bath building.

SASKATCHEWAN.

Melville.—A cold-storage plant costing $60,000 will be erected by the Saskatchewan Co-operative Creameries.

Regina.—The Goodyear Tire and Rubber Co. has announced its intention of building a $75,000 block here at once to serve as western headquarters.

A warehouse will be erected here by the British-American Paint Co.

Plans are in progress and tenders will be called shortly for erection of $50,000 bakery for G. Gillam, Sanitary Bakery.

Young-Thomas Soap Co. will rebuild part of factory destroyed by fire, at cost of $5,000.

The Sanitary Buildings, Limited, contemplate construction of a warehouse and factory at corner of Scarth and Sixth Street. Estimated cost, $25.000.

Saskatoon.—Jackson Machines, Limited, are increasing their building capacity by three new buildings which will make their plant one of the most up-to-date factories in Western Canada. This year they are building 250 sheaf loaders and will increase this number for next year, when they will also be building a low-down type of separator which will be entirely new in this part of the country.

The shareholders of Frontenac Breweries, Limited, have agreed to the proposal of the Directors to increase the capital stock of the company from $1,000,000 to $2,000,000, and to make a further bond issue of $400,000. The additional capital is needed to provide for extensions.



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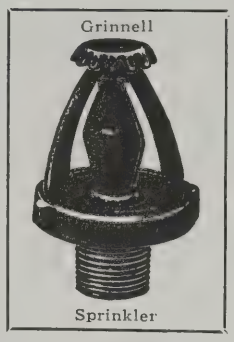
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Recent Trade Enquiries

A List of Enquiries Received from Various Sources including the Canadian Trade Mission, London; the Canadian Trade Commission, Ottawa; the Department of Trade and Commerce, Ottawa; and the Commercial Intelligence Department, C.M.A., Toronto.

Foreign.

71. Agency.—Gentleman recently returned from four years overseas' service with the Canadian forces and having a thorough knowledge of Continental life, is in a position to act as a representative for Canadian firms on a commission basis.

73. Italy.—A correspondent in Genoa is desirous of communicating with some purely Canadian Asbestos Company with a view to representing them in Genoa. He states that a large trade can be developed in Italy, as the mines in Russia are closed.

73. West Indies.—A Canadian correspondent with considerable experience in the West Indies is desirous of representing some Canadian manufacturers.

74. Roumania.—A correspondent with high-class references wishes to represent Canadian manufacturers in Roumania. The goods specified are: Fencing nails, Agricultural implements, Women's wear, Dried fish, etc.

75. Antwerp.—An agency in Belgium is desirous of securing the names of Canadian firms who are likely to consider taking up direct export with Belgium.

76. Agency.—We have an enquiry from a gentleman in Jamaica who is desirous of getting into communication with one or two Canadian manufacturers of food products with the object of representing them on a commission basis or a regular weekly salary basis. He states that at present there are splendid opportunities offered for new and permanent business.

77. Export Agency.—A Canadian export agency with satisfactory bank and business references has opened a branch in Stockholm, Sweden, and desires to bring this fact before manufacturers who might be interested in that territory and at present have no connections there. They also wish to inform Canadian manufacturers that they have a branch in London, England.

78. English Markets.—A Canadian import and export agency of sound financial stability and with branches in London, Liverpool and Bradford, would like to hear from concerns desirous of exclusive representation in English markets.

79. France.—A correspondent who has been established in London as a manufacturers' agent wishes to open an office in Paris and would like to get into communication with some Canadian firms with the object of representing them in the following lines: Paper and other stationery articles; Household enamelledware; Electrical sundries and Rubber sundries; Twines; Foodstuff.

80. England.—A correspondent in Manchester wishes to sell the following articles on commission: Dry Batteries; Pocket Lamps; Electric Novelties; Carbons, etc.

81. Agency.—An export agency specializing in hand tools, hardware and goods appertaining to the general ironmongery trade, would be glad to be placed in communication with Canadian manufacturers of these articles.

82. Jamaica.—A firm in Kingston is desirous of representing Canadian manufacturers who are prepared to give them exclusive option for the sale of their products. This firm is especially interested in: Fishstuffs; Canned Goods; Butter; Margarine; Flour; Biscuits.

83. Roumania.—We have received a communication from a gentleman in Roumania, who for many years has been engaged in business as an importer in that city. He is conversant with five languages and states that he would like to make a connection with Canadian manufacturers for the sale of Canadian goods in Roumania.

84. Building Materials.—An import and export merchant in London who has been importing large quantities of building material from the United States, is seeking a source of supply for these commodities in Canada. He has been asked to quote for Canadian goods and wishes to get in touch with one or two manufacturers who require their goods put on British markets.

85. Liverpool.—An agency in Liverpool with connections in West Africa is prepared to ship palm Oil, Raw Cocoa Beans, and tropical products, direct from West Africa to Montreal, and is desirous to hear from any manufacturers who may be interested. They are also open to buy tallow and grease from Canada.

86. Export.—A London export firm having a branch established in Shanghai for over twelve years is desirous of communicating with Canadian manufacturers of hardware who wish their goods placed on the Northern China market.

87. Buenos Aires.—A firm in Buenos Aires desires the names of Canadian woollen and cotton concerns who wish to be represented in the Argentine Republic, Uruguay and Paraguay. For the past sixteen years this agency has been representing European and American concerns.

88. France.—A correspondent is anxious to act as agent for Canadian goods.

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89. Light Railway Specialties.—A London firm wishes to hear from a Canadian concern who would assemble motor commutators.

90. France.—A firm with several clothing shops in Paris would like to get in touch with Canadian manufacturers of clothing and textiles.

91. Montreal.—A Montreal firm is desirous of securing agencies of Canadian manufactured goods for export trade. They have a large organization operating throughout Great Britain, and are in a position to accept samples and submit them to their London office.

92. Confectionery.—A Liverpool confectionery importer asks for offers of the above.

93. Table Glassware.—A Liverpool firm asks to be placed in touch with exporters of the above.

94. Strawboards.—A Glasgow firm asks for quotations on 3½, 4, 6, 8, 10, and 12 oz. strawboards, lined and unlined, in boards 22 in. by 30 in., in carload lots.

95. Canned Fruits and Fish.—A Glasgow firm asks to be put in communication with exporters of the above.

96. Glasgow.—A Glasgow firm wishes to hear from Flour Mills desiring representation after control is removed.

97. Wrapping Paper.—A Scottish firm asks to be placed in touch with exporters of Kraft Brown paper.

98. Electrical Heating and Cooking Appliances.—A Glasgow firm asks to be put into communication with exporters of the above.

99. Scotland.—A Glasgow manufacturers' agent would like to arrange to represent exporters of ladies' boots, medium and best, and men's boots, medium.

100. Denmark.—A firm in Copenhagen wishes to get into touch with Canadian shippers of salted salmon, canned lobsters, and flour, with a view to the establishment of direct business relations.

101. Railway Ties or Sleepers.—A London company of timber importers and creosoters would be glad to enter into correspondence with Canadian manufacturers of railway ties with a view to future business.

102. Egypt.—A gentleman who has lived many years in Canada is interested in a commercial agency established in Egypt. Being in close touch with conditions in Egypt, Soudan and Syria, he foresees opportunities for Canadian export and import trade with these countries, and would be willing to reply promptly to any enquiries re export or import trade.

103. England.—A manufacturers' agent, with high-class references and good connections with London City and West end firms, is anxious to get in touch with manufacturers of footwear, including rubber overshoes, canvas shoes, rubber Wellingtons and gum boots.

104. Belgium.—A Belgian engineer, 43 years old, graduated from Liege University, who speaks English and is well trained in the manufacture of cement, desires employment with a Canadian industry.

105. India.—A Canadian officer, who is being repatriated from India, is in close touch with Indian manufacturers of silk and sandal-wood oil. On his return to Canada he intends to specialize in products and manufactures of India, and is willing to answer any enquiries respecting prospective markets in India for purchase or sale of manufactures or productions.

106. Hardware, Building and Engineering Goods.—A London firm asks to be placed in touch with Canadian manufacturers of hardware, rails, wire nails, and other building and engineering goods, who wish to extend their business and are not already represented in the United Kingdom. Banker's reference.

107. Boards and Paper.—A firm of wholesale board merchants and paper mill agents in Nottingham would be glad to hear from Canadian manufacturers of boards and papers of all kinds seeking an export outlet.

108. Crude Methyl Alcohol.—An English firm asks for the addresses of Canadian manufacturers of crude methyl alcohol.

109. Oil Cooking and Heating Stoves.—A Liverpool firm asks to be placed in touch with manufacturers of the above.

110. Birch Planks and Boards.—A Liverpool firm asks to be placed in touch with exporters of the above.

111. Mineral Products.—A Sheffield firm asks to be placed in touch with exporters of cobalt, nickel, and ferro alloys.

112. Belgium.—A correspondent is desirous of communicating with Canadian manufacturers of food products desiring a representative in Belgium.

113. Oatmeal and Rolled Oats.—A London firm wishes to hear from Canadian producers of rolled oats and oatmeal.

114. A Director of a large British firm of exporters and importers, with head office in London, and branch offices in New York, Paris, Amsterdam and Brussels, is on his way to Canada for the purpose of establishing relations with Canadian manufacturers interested in European business, and to establish a Canadian office.

115. Glassine Paper.—A London firm ask for the addresses of Canadian manufacturers from whom they can purchase supplies of Glassine Paper.

116. Chocolates.—A London firm of import and export merchants wish to get into touch with Canadian manufacturers who can fill orders for Milk Chocolates and Assorted Chocolates.

117. Kraft Paper.—A Glasgow firm asks for c.i.f. prices on car lots of the above.

118. Ivory and Pearl Buttons.—A Glasgow firm whose supply of the above from the United States has been shut off by restrictions asks to receive samples and quotations from Canadian exporters.

119. Picture Mouldings.—A Glasgow firm asks to be placed in touch with exporters of the above.

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120. Oil Heating and Cooking Stoves.—An Edinburgh firm makes enquiry for oil heating and cooking stoves of the "Perfection" type.

121. Sweetened Condensed Milk and Condensed Milk Powder.—A Glasgow firm asks to be placed in touch with exporters of above.

122. Files and Rasps.—A Glasgow firm asks to be placed in touch with exporters of above.

123. Agricultural Tool Handles.—A Glasgow firm is in the market for considerable quantities of agricultural tool handles.

124. Broom Handles.—A Glasgow firm is interested in importing the above.

125. Wash-boards, Clothes-pegs and Household Woodenware.—A Glasgow firm asks to be placed in communication with exporters of the above.

126. Kraft Paper.—A Glasgow firm make enquiry for Kraft Paper.

127. Woodworking Machinery.—A Glasgow firm would like to hear from exporters of woodworking machinery, saw benches, band-saw machines, planing machines, mortising machines, etc.

128. Cycle Accessories.—A Glasgow firm asks for Catalogues and prices of cycle accessories, such as lamps, frames, bells, chains, etc.

129. Gramophones, etc.—A Glasgow firm are in the market for gramophones and gramophone motors that can meet existing competition.

130. Automobile Accessories.—A Glasgow firm asks for catalogues and price-lists of automobile accessories, such as horns, mechanical and electric, tire pumps, lamps, hub caps, hub-cap and sundry spanners, etc.

131. Aluminum Billets.—A Glasgow firm asks for quotations on 300 tons of aluminum billets.

132. Hardware.—A correspondent with extensive business connection wishes to arrange with export manufacturers in Canada of hardware and woodenware to represent them in England.

133. England.—A reliable firm in London wishes to get in touch with Canadian packers of jam: plum, peach, quince, gooseberry, pear, strawberry, raspberry, and apricot. They already handle a large trade with South Africa and could do the same with Canada.

134. Holland.—We have numerous enquiries from reliable agents in Holland, wishing to get in touch with Canadian manufacturers and exporters of the following: biscuits, preserves, tinned goods, jams and confectionery.

135. Leather, Agricultural Implements, Oilcake, Asbestos, Aluminum.—A Belgian company with branches in the United Kingdom, France, the United States, etc., is desirous of securing the sole agency for Belgium of Canadian manufacturers of sole leather, agricultural implements, oilcake, asbestos and aluminum in pigs.

136. Wood, Steel and Leather Products.—A correspondent who has been crossing the ocean continuously from 1880-1908, calling on manufacturers in Great Britain and France, is keenly aware of the openings for manufacturers of wood, steel and leather products in the British market, and knows where there are still opportunities for Canadian makers now supplying manufactured lines formerly purchased from German makers. Having the knowledge and experience, he is anxious to get in touch with Canadian manufacturers with the object of representing them in the British Isles and France.

Taking Over Toronto Plant

British Forgings Plant Become Baldwin's Canadian Steel Corporation, Limited

Announcement is made that the British Forgings plant at Toronto, which was recently bought by Baldwin's, Ltd., of Swansea, Wales, will be operated as Baldwin's Canadian Steel Corporation, Ltd. The new firm will be capitalized at $10,000,000, it is said, and will employ 2,300 men within a year.

E. L. Cousins, chief engineer of the Toronto Harbor Commission, who negotiated with the company on behalf of the city and the harbor commission, states that A. M. Russel, of Hugh Russel & Sons, Ltd., Montreal, was largely instrumental in persuading Baldwin's to establish a plant in Canada. Mr. Russel went to Wales for the purpose of interesting his principals, with the result that J. C. Davies, managing director of Baldwin's, Ltd., came to Canada, accompanied by D. E. Roberts, consulting engineer of the company, and the deal was consummated soon afterwards. Mr. Russel will be president of the new Canadian corporation.

Within a few months the new firm will begin the manufacture of tin plates, black sheet and galvanized sheet. The British Forgings plant, located in the Toronto Harbor Commission's eastern harbor terminal, is 127 acres in extent, with 1,600 lineal feet of 24-ft. dockage.

HON. FINLAY G. MACDIARMID,
Minister of Public Works

W. A. RIDDELL, M.A., Ph.D.,
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The Factory, Shop and Office Building Act
The Steam Boiler Act
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The value of these bureaus will increase in proportion to the extent to which they are used by employers.

NOTICE TO STEAM USERS:

At the last Session of the Legislature, the Act respecting Stationary and Hoisting Engineers was amended, said amendment requires that on and after January the 1st, 1920, all stationary steam plants in the Province of Ontario must be registered with the Board of Stationary and Hoisting Engineers. Application forms for this purpose will be forwarded on request. The boiler horsepower and other information contained in these application forms is to be used for statistical purposes.

A Registration Certificate will be issued to each applicant.

W. C. McGHIE,
Chairman of Board
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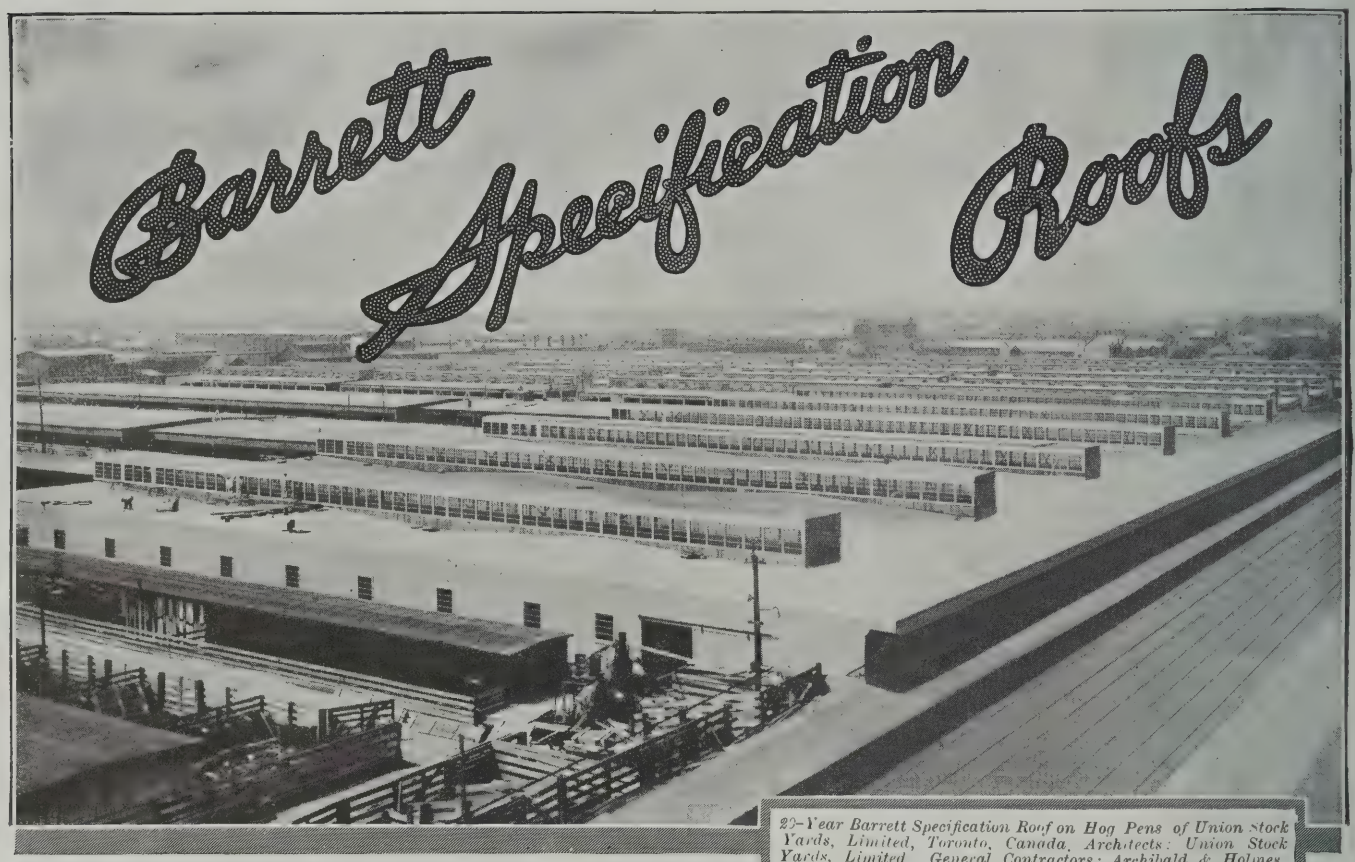
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20-Year Barrett Specification Roof on Hog Pens of Union Stock Yards, Limited, Toronto, Canada. Architects: Union Stock Yards, Limited. General Contractors: Archibald & Holmes, Toronto, Canada. Roofers: The Maitland Roofing & Supply Company, McDermid Bros. Successors, Toronto, Canada.

100,000 Square Feet of Barrett Specification Roofs

The above photograph shows the mammoth new Hog Pens of the Union Stock Yards, Ltd., Toronto, in process of construction.

This is a roofing job of more than one hundred thousand square feet, covering one continuous building, extending back beyond the sixth monitor in the picture.

Naturally, in deciding what type of roof to adopt for this enormous plant, the question of cost had to be given careful consideration.

It is significant, therefore, that a Barrett Specification Roof should have been decided on.

It means that the Union Stock Yards architects fully realize what so many architects and builders have come to appreciate—that it *pays* to buy the *best* roof because, while the original cost may be a little higher, *the cost per year of service is lower than for any other type.*

This plant has a roof that will stand up year after year under the rigorous Canadian climate; one that takes the base rate of insurance and that is guaranteed for 20 years.

Guaranteed for 20 Years

So sure are we of the service Barrett Specification Roofs will give *under the most severe conditions*, that we are prepared to *guarantee them for 20 years,* in all towns of 25,000 or over, and in smaller places where our Inspection Service is available provided they are 50 squares or more in area. The guaranty costs you nothing. We merely require that our Specification dated May 1, 1916, shall be strictly followed and that the roofing contractor be approved by us. The guaranty is a Surety Bond issued by a well-known fidelity and guaranty company.

A copy of The Barrett 20-Year Specification, with roofing diagrams, sent free on request.

The Barrett Company LIMITED

MONTREAL TORONTO WINNIPEG VANCOUVER
ST. JOHN, N.B. HALIFAX, N.S. SYDNEY, N.S.

INDUSTRIAL CANADA

ISSUED BY

The CANADIAN MANUFACTURERS ASSOCIATION.

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Editorial Comment

The Country's Need

AT the present time grave economic problems threaten to disturb the equanimity of civilized society and even to endanger its existence. Strikes and riots, in many countries, show how widespread is this vague unrest; and, by extending from the industrial to the political field, these economic disturbances are shaking the entire fabric of civilized society. This discontent is not confined either to politics or industry. Many groups of society have prepared their personal lists of grievances, have organized, and appear determined to secure demands, arising out of these alleged grievances, without showing any particular consideration for other classes, or the welfare of their community as a whole.

This unrest which is sweeping over the world is no doubt due to natural as well as artificial causes, and one of these causes is the reaction from the nervous strain and severe discipline to which most civilized peoples have been subjected during the war.

A great political upheaval is almost invariably followed by industrial disturbances, for obvious reasons, and it is therefore not surprising that the greatest war in history should bring in its train the most serious industrial unrest. It is the heaving of the sea after the storm. In our time this natural phenomenon has not only produced industrial trouble, but, by its very magnitude and intensity, appears to be reaching out, through industrial channels, to influence the political and social functions of the state.

The times are abnormal, the minds of men are abnormal, but the present conditions will not be the conditions that will obtain in ordinary times, which, we hope, will soon return.

There are some who insist now, as some have always insisted, that the present constitution of society is all wrong, that the industrial organization of the modern world is wrong, and that it must be completely transformed according to certain theories which they will demonstrate by force if necessary; but the majority are optimistic enough to believe that during the centuries when our present form of society, including our industrial system, was evolving, the world has moved steadily, though slowly, forward.

The British Empire, for example, which particularly represents the Anglo-Saxon portion of civilization, has extended British law and British ideals over one quarter of the earth's surface, has attained and kept command of the seas, and has been the backbone and mainstay of the allied forces in the Great War. Consequently, is it not reasonable to assume that the industrial organization which has been part of that system of society must have some real merits, and must have been founded on principles of truth?

When we turn to Canada, and survey our own history, and examine the part which Canadian industry has played both in peace and war, can we not also feel some assurance that our industrial system has been and is based on sure foundations?

There are at present about 700,000 people employed in Canadian factories. With their dependents, they number about 2,000,000. Thus the factories of Canada provide a living for 2,000,000 people, or a quarter of the total population.

This is a concrete and permanent result which those who talk lightly of revolutionizing our industrial system, might well keep in mind; and, conversely, if this industrial system is broken down, 2,000,000 Canadians will be directly affected and other millions will indirectly suffer.

Certain demands are being made by the representatives of the wage-earners, through the employers to the public. It is only right and fair that these demands should receive a careful and sympathetic hearing. Employers do not contend that the industrial system cannot be improved. They see considerable room for improvement. But the people of Canada must consider not only what is desirable but also what is possible. Those engaged in industry, both employers and employees, constitute only one section of the population and no section can long enforce its will upon the majority. The 700,000 people, including employers and employees, engaged in industry, constitute only about 9 per cent. of the population of Canada; with their dependents they form about 25 per cent. Organized labour includes about 3 per cent. of the population; with their dependents, about 10 per cent. All wage-earners in urban communities and their dependents, include considerably less than half of the population. Consequently, we must remember that those engaged in industry are a minority of the people of Canada, and that the people of

Canada will quickly remind us of this fact if we attempt to attain our own ends without considering the national welfare.

Let us, therefore, regard industrial matters from the national point of view. We strongly believe that industrial employees and all other wage-earners should have as short hours, as high wages and as many privileges as the rights of all other citizens and the competition of other nations permit them to enjoy.

There is no doubt that the necessity of increasing our national production is the most important question now before this country. That it has become a critical problem in the United Kingdom is shown by the following extracts from recent speeches by British Ministers:

David Lloyd George, Prime Minister of Great Britain, in the House of Commons, August 7th, 1919,—

"The situation is indeed grave, but not beyond the compass of its resources if the nation will pull itself together. All that is needed is that everybody throughout the land put forth their best exertions as they did during the war, and we shall emerge triumphantly."

Hon. J. Austen Chamberlain, Chancellor of the Exchequer, Great Britain, House of Commons, London, August 7th, 1919,—

"If we can't increase production, we shall go straight to national bankruptcy. Neither increased production nor reduced expenditure alone will be sufficient. We have got to do both if we are to pull through and turn the corner."

Sir Robert Horne, Minister of Labour for Great Britain in July, 1919,—

"Any man who is unprepared to put forth an effort even greater than that he made during the war mocks the dead he professes to glorify. They died to preserve their country. If men are unwilling to exert all their power in peaceful production and honest toil, the country will be ruined as irretrievable as if the Hun had invaded it and spread his devastating hand over it."

This year the Government's budget calls for about $450,000,000, or about $150,000,000 more than our revenue. Our total gross debt is $1,863,000,000. How can we bear our increased national burdens unless we increase our national production, consume the minimum, and sell as much as possible? Yet, manufacturers have been forced to refuse foreign contracts running into an aggregate of millions, because they dared not tender lest threatened strikes between closing and delivery should turn their estimated profits into heavy losses. Other countries are crying out for our goods. We never had such an opportunity to sell abroad. Is it not of vital importance that we be guaranteed such stability in economic conditions as will enable us to take advantage of these opportunities?

All must realize that the fundamental principles of economics govern the conditions under which men work, and under which the business of the country is conducted. Legislation has its function, but legislation which attempts to limit or pervert great natural laws will defeat its own ends and injure those whom it designed to benefit.

A Cause of Industrial Unrest

IS it possible that a portion, at least, of the industrial unrest prevalent at the present time is chargeable to the advertising being put out so prolifically in the magazines by the correspondence schools? At least, one Canadian manufacturer is of this opinion and he advances a quite reasonable argument in support of his theory.

"Almost without exception," he writes, " these correspondence schools seemingly offer wonderful sure things to those who subscribe for their courses and usually lead off in startling head lines. Many of these advertisements are appealing to men in the shops to get out of their present positions into ones of greater magnitude, pleading with them not to be satisfied with anything less than the presidency or treasurership or managership of a company and pointing out that other men no better fitted are now making $10,000 a year, where formerly one-tenth of it was their limit, etc.

"Some of the illustrations are designed to make an increased discontent on the part of the one appealed to; in fact on one or two occasions the appeal was pictured in such a way that it was almost Bolshevism. In looking for the cause of continued unrest, I believe that this is one of the contributing factors. It is perfectly natural for a man to want to do better than he is doing or to get a good deal more than he is getting and under seemingly easier conditions, but the fact of the matter is that many a good mechanic is disconcerted and soured on his good job with no possibility, by reason of his particular incapacity, of ever getting into a $10,000 class so alluringly promised.

"I venture to say that not one in 500 of those who subscribe to the courses, make the success of it that the advertisements claim in generality, and what otherwise would prove to be a force of good, interested men, on the factory side of the business, are turned into more or less disgruntled, easily-inflamed, discouraged floaters, whose failure to attain the position pictured to them, makes them a liability of first magnitude. These same men appealed to to improve themselves in their own particular lines, to study ways and means of increasing production and of working in with their various companies along that line, with the probability of their reward for so using their brain, naturally adaptable to that line of thinking, would help solve the difficulty of the present hour in securing thoughtful co-operation and genuine results in the increasing demand for greater production."

With the general idea of the correspondence school there can be no just quarrel. These schools have undoubtedly done real service in bringing the opportunity to study and better themselves mentally to thousands of people who would otherwise never have enjoyed that opportunity. Any incentive to improve one's condition mentally and socially must be good and the agency that gives the incentive merits approbation. It is to be feared, however, that several of these schools, in an effort to get pupils, have gone too far in the direction of using exaggerated bait



The National Industrial Conference in Session

View of the Senate Chamber, in which the Conference was held, taken from the rear of the employers' side of the House. The chairman, Hon. Gideon Robertson; Hon. N. W. Rowell, and several well-known captains of industry may be seen in the gathering

in their advertisements. There are limitations to the capacity of all of us and these limitations should be recognized. To lure the artisan from his bench with the promise of immensely larger returns in the field say of salesmanship, if that artisan has no real capacity for salesmanship, is obviously wrong and cannot be condoned.

The very plan of operation of correspondence schools makes it difficult to deal with this problem, as there is no personal contact between teacher and pupil. But if harm is being done through the creation of a number of discontented and disgruntled floaters, surely some remedy should be sought. Would it not be possible for the schools to pay more attention to technical training, with a view to holding men in industry, instead of enticing them away into other over-crowded fields of effort? We need production and, as contributing to it, greater efficiency. A splendid patriotic work could be done in promoting that end and no criticism could be made of any advertisements which sought to make the artisan a better workman.

The Victory Loan Campaign

IN self interest, if for no broader reason, the manufacturers of Canada should put their shoulders vigorously to the task of making the approaching Victory Loan Campaign the success it must be if the country is to carry on. We have no longer the incentive of the war-appeal to help us secure the necessary funds. That is over and many people, having this motive withdrawn, will feel that there is no longer any special call on their patriotism. This attitude must be overcome and it will be the part of the leaders of industry, who realize the issues at stake, to see that those in their employ are given a proper conception of the duty that lies before every citizen.

However wide may be the differences of opinion as to the financial policy of the Dominion, there can be no escaping the necessity for the immediate borrowing of a very large sum of money. No other course is open to the Government and this might as well be admitted at the outset. There is a large floating indebtedness which is being increased daily; the costs of demobilization and rehabilitation are still immense and there is only one way of maintaining the volume of our export trade and that is by the provision of credits, which will enable foreign countries to continue their purchases of Canadian goods. The whole situation reacts on the factory, and, if we are to provide profitable employment for our population throughout the winter, it is essential that the Government should be given the means of carrying out its obligations.

From the experience of previous loans, employers must realize that it is a good thing to have the worker of the country participate in these government flotations. In these days of unrest, the stabilizing influence latent in the possession of Dominion Government bonds, is valuable. Subscriptions encourage thrift and thrift is a laudable virtue at all times and particularly in the present abnormal period. Possession suggests responsibility and where there is responsibility there need be little fear of revolution. From every angle there is benefit attaching to participation in government flotations and we believe that the members of the Canadian Manufacturers' Association will not be behind hand, both as regards personal and company subscriptions, and advice and encouragement given to their employees in connection with the loan.

The National Industrial Conference

A Survey of the Results Achieved by this Notable Gathering, together with an Account of the Events Leading Up to it, and a Record of the Resolutions Submitted on the Various Items of the Agenda

THE National Industrial Conference assembled in Ottawa from September 15th to September 20th during a period of peculiar significance in Canadian history. For the first time it was considered expedient to call together representatives of industry for the purpose of discussing industry and its relations, not only to its own constituent elements, but also to the nation. The public was represented by a third group, which, though it was denied the right to vote, had the right to speak on any subject on the agenda. The agenda was compiled from the recommendations in the report of the Royal Commission on Industrial Relations which toured Canada last spring and took evidence in twenty-eight industrial centres.

Throughout the conference the courtesies of debate were well observed, and the questions at issue were discussed in a constructive spirit. The presence of the third group reminded both employers and employees that industrial questions must be considered from the national rather than from the partisan point of view.

There was a gratifying unanimity reached on certain subjects of the agenda. The question of unifying and coordinating the existing labor laws of the Dominion Parliament and of the provincial legislatures, caused little difference of opinion, except as to the matter of procedure, as it was felt that it would be to the advantage of all parties to have not only labor laws but all laws as uniform as local conditions would permit.

In regard to the establishment of Joint Plant and Industrial Councils, the employers agreed so far as the individual plant is concerned, but they objected to the establishment of a Government Bureau to promote the development of such councils on the ground that a standardized government scheme would not be suitable for all conditions. Compromise was reached by the employees consenting to the limitation of the Government Bureau's activities to the collection and furnishing of information upon request. A compromise was reached in regard to minimum wage laws. The employees demanded minimum wage law for all classes of labor; the employers consider the advisability of establishing, after investigation, minimum wage laws for women and children as local conditions required, but firmly opposed the establishment of any minimum wage law for adult male labor. An agreement was reached on this basis.

It was unanimously decided to recommend the appointment of Boards of Enquiry into the subjects of state insurance against unemployment, sickness, invalidity, and old age. It was also unanimously agreed to ask the government of each province to establish compulsory education for full time at least up to and including the fourteenth year, and for part time in cities and towns for the two ensuing years. It was also recommended that in all provinces, education should be made free.

The Royal Commission's views on freedom of speech and freedom of the press were endorsed, but it was recognized that no person has a right to do anything that is liable to incite people to commit unlawful acts.

A joint resolution was also adopted asking federal, provincial, and municipal governments to provide for immediate and continuous survey of available and prospective employment, and for adequate employment machinery to direct unemployed workers to available employment.

Employers and employees agreed to disagree on three points. The first was the subject of the hours of labor. The employees' delegates asked that legislation be introduced establishing the 44-hour week throughout Canada. The employers took the ground that the hours of labor cannot be made a subject for legislation, except where it can be shown, after investigation, that the health of the worker in the industry under discussion is injured by too long application. The employers showed that the demand for a 44-hour week is only a camouflaged demand for higher wages, because it would be necessary, if the 44-hour week were established, to increase wages greatly by the payment of time and a quarter or time and a half overtime rates. They contended that the hours of labor must be governed by economic conditions, such as the necessity for production and the competition of other countries. They pointed out that the regulation of hours of labor by law immediately transfers the whole subject from the economic to the political field, to which it does not properly belong.

The second point on which there was disagreement was the recognition of unions and their demand to bargain collectively. The employers admitted the right of the

HANSARD REPORTS SUPPLIED

Arrangements have been made by which every member of the Canadian Manufacturers Association will be furnished with a complete verbatim report of all proceedings and discussions at the National Industrial Conference. These were reported in Hansard form by the stenographic staff of the Senate, and are now available in paper bound copies. All members are urged to make a careful study of these reports.

employees to join any lawful organization, but they contended that employers should not be required to recognize unions or to establish "closed shops." They insisted on the right, when so desired, to maintain their plants as "open shops," by which they mean that no employer should discriminate against any employee because of the latter's membership or non-membership in any organization, and no employee should interfere with any other employee because of the latter's membership or non-membership in any organization. In regard to collective bargaining, employers contended that they should not be required to negotiate, except directly, with their own employees, or groups of their own employees.

The third point of disagreement rose in connection with the recommendation that employees of the Government should be given the right to appeal to some independent tribunal for settlement of their wage and other grievances against the Government. The employers took the ground that the subject was one for the Government itself to deal with and was not within the jurisdiction of the conference.

The conference no doubt had great educational value. The resolutions adopted or recorded and the information and arguments produced in support of them become part of the permanent records of the Government, and will be consulted when legislation is proposed.

The employers conceded what they felt was required, not by labor alone, but by the national interests, but on certain points, which they considered fundamental, they took a firm stand, advanced sound arguments in support of their views, appealed to the sound judgment of the country and maintained their position fearlessly.



Hon. Gideon Robertson

Canada's Minister of Labor, who was largely responsible for the holding of the Conference and who presided most acceptably over its deliberations

Origin of the Conference

The National Industrial Conference originated from a resolution which was passed on March 19th, last, by the Labor Sub-Committee of the Reconstruction and Development Committee appointed by the House of Commons. The resolution follows:—

"The Labor Committee has been impressed by the necessity of some policy being formulated which will bring about the adoption of co-operative relations between employers and employees in the various lines of industry, as the best means of establishing a satisfactory relationship in industry throughout Canada. The Labor Committee realizes the different conditions existing in various industries, but nevertheless feels that there are certain basic principles which apply to all. The Labor Committee has itself given earnest consideration to the efforts which are being made in this and other countries for the solution of the problem of industrial relationships, and, recognizing the complexity and importance of this problem, recommends that a Royal Commission be appointed immediately to report to the Government on the following matters, namely:

"1. To consider and make suggestons for securing a permanent improvement in the relations between employers and employees.

"2. To recommend means for ensuring that industrial conditions affecting relations between employers and employees shall be reviewed from time to time by those concerned with a view to improving conditions in the future.

"For the above purposes the Commission shall:—

"1. Make a survey and classification of existing Canadian industries.

"2. Obtain information as to the character and extent of organization already existing among bodies of employers and employees respectively.

"3. Investigate available data as to the progress made by established joint industrial councils in Canada, Great Britain and the United States."

Suggestion Approved by Privy Council

The Committee of the Privy Council on April 4th, last, concurred in the foregoing recommendations and appointed the following Commission, which was called "The Royal Commission on Industrial Relations."

The Hon. Chief Justice Mathers, of Manitoba, Chairman.

The Hon. Smeaton White, a member of the Senate, and Managing Director, *Montreal Gazette* Publishing Co., Montreal.

Charles Harrison,, M.P., railroad conductor, North Bay, Ont., as representatives of the public.

Mr. Carl Riordan, President, Riordan Pulp and Paper Co., Montreal, P.Q.

Mr. F. Pauze, lumberman, Montreal, P.Q., as representatives of the employers.

Mr. T. Moore, Ottawa, President of the Trades and Labor Congress of Canada.

Mr. J. W. Bruce, of Toronto, member of the Labor Appeal Board, as representative of the employees. Mr. Thomas Bengough, of Toronto, who served as Secretary of the Technical Education Commission, Secretary.

This Commission opened its inquiry at Victoria, B.C., on April 26th, and completed its tour in Ottawa on June 13th, last. Between these dates the Commission held 70 sessions in 28 industrial centres extending from Victoria, B.C., to Sydney, N.S. During the sittings the Commission heard 486 witnesses. The sittings of the Commission were advertised in advance, and any one who cared to do so was permitted to give evidence. The following majority of the Commission reported to the Government on June 28th: Messrs. T. G.

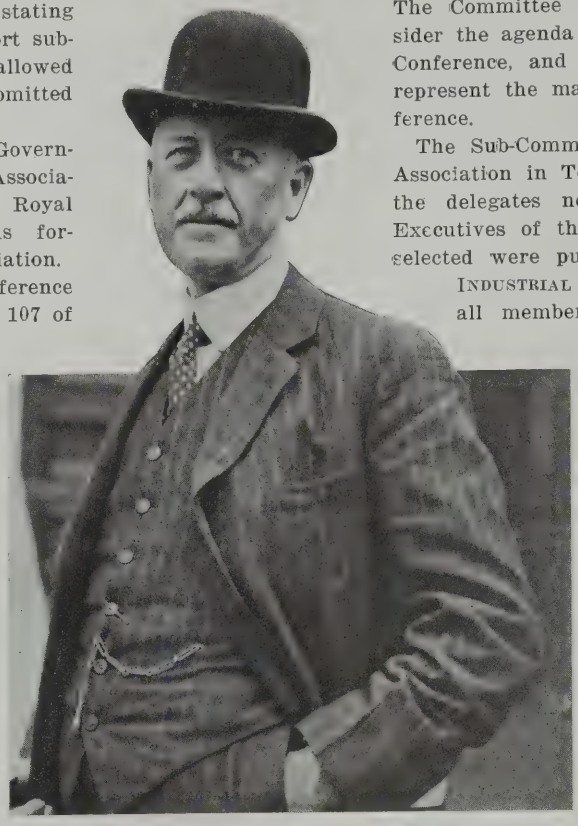
Mathers, Chairman; Carl Riordan, Charles R. Harrison, Tom Moore, John W. Bruce and Thomas Bengough, Secretary.

A minority of the Commissioners, consisting of Senator Smeaton White and Mr. Frank Pauze, dissented from the views of the majority and submitted a separate report to the Government on June 25th. A supplementary report, signed by Mr. Carl Riordan, stating that he had signed the majority report subject to the privileges of his being allowed to make comments thereon, was submitted to the Government on June 29th.

By special arrangement with the Government, the Canadian Manufacturers' Association had a copy of the reports of the Royal Commission on Industrial Relations forwarded to each member of the Association.

The suggestion that a National Conference be called was contained in clause No. 107 of the majority report, which reads as follows:

"If it is finally decided that the enactment of any legislation necessary to give effect to our recommendations is not within the competence of the Parliament of Canada, we suggest that in order, if possible, to secure concerted action on the part of the different Provincial Legislatures, a conference should be held in the near future in the City of Ottawa. To this Conference we suggest that the Premiers, or other members of the Governments of each Province, together with representative employers, be invited for the purpose of considering the whole question, and, if possible, arriving at a unanimous decision. We believe it is in the interest of harmony that concerted action along this line should be taken, and we know of no better means of bringing about unanimity. At such conference the question of unifying and co-ordinating the existing legislation bearing on the relations between employer and employees, now in force in the several Provinces and in the Dominion, might be carefully considered and reviewed."



J. R. Shaw

Well-known Woodstock Manufacturer who acted as leader of the employers throughout the Conference

Calling the Conference

Hon. G. D. Robertson, Minister of Labor, in a letter dated Ottawa, July 21st, 1919, notified the Canadian Manufacturers' Association that the Dominion Government had approved of the proposal contained in the report of the Royal Commission on Industrial Relations to hold a conference of Dominion and Provincial Ministers and of representative employers and labor men, for the purpose of discussing the recommendations contained in the Commission's report. The date set for the conference was September 11th, which was subsequently changed to September 15th.

The Canadian Manufacturers' Association was allotted 25 delegates, as follows:—

	Delegates.
Iron and Steel Industry	2
Packing Industry	2
Flour Mill Industry	2
Shipbuilding Industry	2
Pulp and Paper Industry	2
General Manufacturing	15
Total	25

This allotment was later increased to 36.

It had been the policy of the Association in the past not to deal with labor matters, but owing to the industrial unrest and more particularly to the appointment of the Royal Commission on Industrial Relations, the annual meeting, held in Toronto in June, last, decided to appoint an Industrial Relations Committee to deal with labor questions.

A meeting of the Industrial Relations Committee was called at the head office of the Association on July 30th. The Committee appointed a sub-committee to consider the agenda of the proposed National Industrial Conference, and to select the delegates who would represent the manufacturing industries at that Conference.

The Sub-Committee met at the head office of the Association in Toronto, on August 6th, and selected the delegates nominated by the various Division Executives of the Association. The names of those selected were published in the September issue of INDUSTRIAL CANADA. A circular was issued to all members of the Canadian Manufacturers' Association outlining the objects of the National Industrial Conference, containing the agenda of the Conference, and asking for the opinion of members as to the attitude which should be taken by the Association's delegates. Instructions were issued to the staff to secure all possible information on the subjects mentioned in the agenda. With the assistance of the head office staff and legal counsel who had been specially retained, a large amount of valuable information was obtained for the information of our delegates.

The following committee of seven, appointed to advise in respect to arrangements on the agenda for the Conference, met in Ottawa, on September 11th: Chairman, C. A. Magrath; Representatives of Employers: Messrs. C. H. Carlisle, Goodyear Tire & Rubber Co. of Canada, Ltd., Toronto; F. P. Jones, Canada Cement Co., Ltd., Montreal; E. G. Henderson, Canadian Salt Co., Ltd., Windsor, Ont. For the employees: Messrs. R. A. Rigg, Organizer of the Trades and Labor Congress of Canada, Winnipeg; Gus Francq, of the International Typographical Union, Montreal; W R. Rollo, Broom and Whisk Makers' Union, Hamilton.

Nine Committees Appointed

It was recommended that nine committees should be appointed by the Conference to bring in resolutions on the following subjects:

1. Industrial disputes legislation and other labor laws.
2. Hours of labor.
3. Minimum wages legislation.
4. Employees' right to organize, the recognition of labor unions and the employees' right to collective bargaining.
5. The proposed establishment of joint industrial councils.
6. State insurance against unemployment, sickness, invalidity and old age.
7. Proportional representation.
8. Other features of the report of the Royal Commission on Industrial Relations.
9. Consideration of any other proposals which may be introduced bearing on the relations of employers and employees.

Resolutions

The following resolutions were submitted to the Conference in the order mentioned:

(1) Industrial Labor Laws

"Resolved: That the advantage of uniformity in the laws relating to the welfare of those engaged in industrial work in the several provinces of the Dominion of Canada be brought to the attention of the Government of Canada and of the Governments of the several provinces respectively; and, that this National Industrial Conference suggests the following as a means towards the end desired, namely:

"The appointment of a board composed as follows:

"(1) As respects the Dominion:
(*a*) A representative of the Government.
(*b*) A representative of the employers.
(*c*) A representative of the employees.

"(2) As respects each of the Provinces:
(*a*) A representative of the Government.
(*b*) A representative of the employers.
(*c*) A representative of the employees.

"And that the Dominion Government be requested to ask the Government of each of the Provinces to select or have selected representatives in respect of the Provinces as above set forth."

Adopted unanimously.

(2) Proportional Representations

"Believing that there are defects in the system of Electoral Representation in Canada, which defects are stated by the Royal Commission on Industrial Relations to be a contributory cause of social and political unrest, this Conference welcomes the declaration of the Prime Minister on behalf of the Government, that a Speaker's Conference will be called to investigate the merits of the Proportional System, and urges that such action be taken without delay."

Adopted unanimously.

(3) Joint Industrial Councils

"Your Committee is of the opinion that there is urgent necessity for greater co-operation between employer and employee. We believe that this co-operation can be furthered by the establishment of Joint Industrial Councils. Your Committee does not believe that it is wise or expedient to recommend any set plan for such Councils.

"We therefore recommend that a Bureau should be established by the Department of Labor of the Federal Government to gather data and furnish information whenever requested by employers or employees or organizations of employers or employees, and that whenever it is desired to voluntarily establish such councils the fullest assistance should be given by the Bureau."

Adopted unanimously.

(4) Unemployment, Sickness and Old Age Insurance

"This Committee unanimously endorses the recommendations of the Royal Commission on Industrial Relations that a Board or Boards be appointed to enquire into the Subjects of State Insurance against Unemployment, Sickness, Invalidity and Old Age.

"For the effective carrying out of the above this Committee recommends:

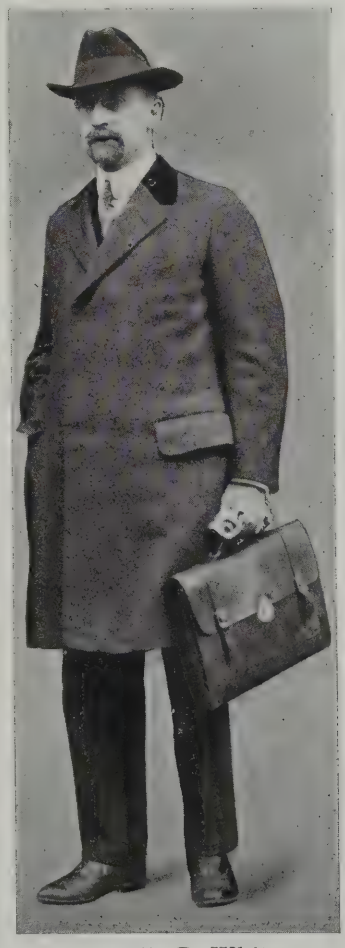
"1st. That such Board or Boards shall be representative of the interests participating in this Conference, viz., the Government, the public, the employer and the employee, and shall include a representative of the women of Canada.

"2nd. That in order to collect necessary data, the Government shall forthwith attach to the proper branches of the labor or other departments concerned experienced investigators, who shall do the necessary research work and furnish to the Board at the earliest opportunity the results of their investigations.

"3rd. That the Government shall set a time limit for the receipt of the report and recommendations as to the advisability of enacting legislation.

"4th. While this Committee has been appointed to consider only the questions of State Insurance against Unemployment, Sickness, Invalidity and Old Age, it respectfully recommends that the subject of 'Widows' Pensions' be added."

Adopted unanimously.



Melville P. White

Toronto Manufacturer, who figured prominently in the proceedings of the Conference

(5) Minimum Wage Laws

"Whereas it is considered expedient that minimum rates of wage should be fixed throughout Canada for women and children, whether employed at a time rate or according to any other method of remuneration;

"Whereas Minimum Wage Laws for women and children have been enacted in five, and are now in operation in four, of the Provinces;

"Therefore, be it resolved, that this Industrial Conference recommend to the Governments of all those Provinces which have not adopted Minimum Wage Laws for women and children, the speedy investigation of the necessity for such laws, and, if so found, the enactment of such legislation.

"It is further recommended that the various Provinces throughout the Dominion adopt a uniform law and method of application, but that in all cases the minimum of wages for women and children is to be determined from time to time, due regard being given to the local living conditions.

"It is the opinion of this Conference that the Dominion Government should appoint a Royal Commission, composed equally of representatives of labor, employers, and the public, to investigate wages to unskilled workers, and issue a report.

"Representation has been made to the Committee that the remuneration paid female school teachers in one of the larger Provinces of the Dominion is so low as to discourage the employment of the talent necessary to the proper education of its citizens. Your Committee recommends that the various Provincial Governments be asked to investigate such conditions, in the respective Provinces, to the end that the children of all Provinces of the Dominion have equal educational opportunities."

Adopted unanimously.

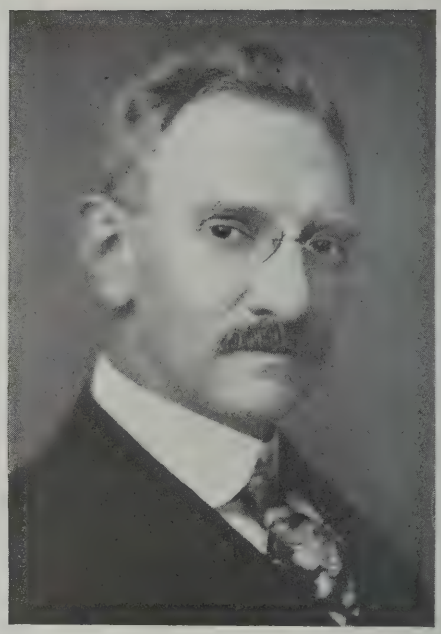
(6) Free Compulsory Education

"That this Conference endorses the recommendation of the Royal Commission on Industrial Relations as to the necessity of the extension of equal opportunities in education; and, in view of bringing about this reform;

"That the Government of each Province in Canada be asked to establish compulsory



Tom Moore
President of the Trades and Labor Congress of Canada and leader of the employees' side at the big Conference



C. H. Carlisle
As chairman of the C.M.A.'s Industrial Relations Committee, Mr. Carlisle had much to do with working up the employers' side of the argument

education, for full time at least, up to and including the fourteenth year, and for part time in cities and towns for the two ensuing years; and

"That, in all Provinces, education in all grades should be made free, so that the child of the poorest paid worker be given the opportunity of reaching the highest educational institution."

(7) Freedom of Speech and the Press

"That we unanimously endorse paragraph 70 of the Report of the Royal Commission, as follows:

"(70). The restrictions placed upon the freedom of speech and the liberty of the press, and the denial of the right to read such literature as any portion of the public demanded, was given as one of the principal causes of the present industrial unrest. During the war it was necessary in the interests of the whole country and of the Empire that individual liberty should in many directions be restrained, but we believe that restrictions should not be imposed upon either the freedom of speech or the freedom of the press unless such restrictions are urgently demanded in the interest of the peace of the whole community. We recognize that no person has a right to do anything that is liable to incite the people to commit unlawful acts. A line must be drawn between liberty and license, but care must be taken to avoid creating the impression that the restraints imposed upon the freedom of speech or the liberty of the press, are intended to prevent criticism of legislative or governmental action."

Adopted unanimously.

(8) Employment and Unemployment

"1st. That in the ouinion of this Conference adequate provision, by the public works or otherwise, should be made by the federal, provincial and municipal governments in connection with all interests represented at this Conference, to avert any serious unemployment crisis which might occur during the ensuing eight months.

"2nd. That the various interests represented at this Conference adhere strictly to the employment policy agreed upon by the Provincial Governments, which aims at the centralization of labor supply and demand in one agency.

"3rd. That provision be made for immediate and continuous survey of available and prospective employment, and for adequate employment machinery to direct unemployed workers to employment available."

Adopted unanimously.

(9) Insufficient and Poor Housing

"That this Conference commends the action of the Dominion and Provincial Governments in their united efforts to improve housing conditions and to provide facilities for the proper and satisfactory housing of our people, and recommends increased co-operation of, and investigation by, the Dominion and Provincial Governments to find a satisfactory solution of the problem."

Adopted unanimously.

Where They Disagreed

On three subjects of the agenda no agreement was reached, and the resolutions submitted by the various parties were simply recorded on the proceedings of the agenda.

Hours of Labor

The first subject on which disagreement was reported was the hours of labor.

(*a*) The following resolution was returned by the delegates of employers:

"Resolved that appropriate Government Commissions, composed of an equal representation of employers and employees

of the various industrial, producing and distributing industries, should be appointed to undertake investigations as to the adaptability of the hours of labor principles of the Peace Treaty to the different industries of the country, and to report as early as possible."

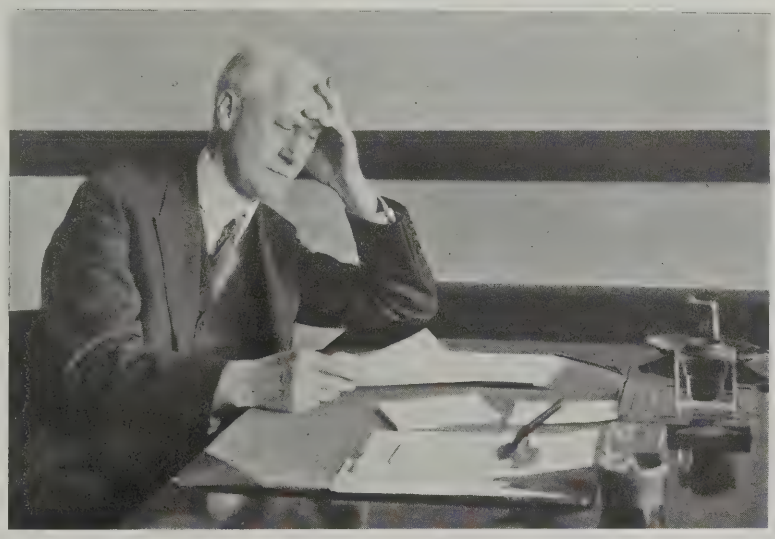
(*b*) The following resolution was returned by the delegates of employees:

"That we agree with the recommendations and findings of the Royal Commission on Industrial Relations, and urge the adoption of an eight-hour day by-law throughout the Dominion, with due regard and recognition of the Saturday half-holiday where same prevails, and, if possible, extension.

"In industries subjected to seasonal and climatic conditions, such as farming, fishing and logging, if it can be established by investigation that the operation of such a law is impracticable, then exemption shall be granted such industries from the operation of the law."

(*c*) The following resolution was returned by delegates representing the third party:

"We approve of the principle regarding employment and hours of labor set forth in the Treaty of Peace and in paragraphs 50 to 53, inclusive, of the report of the Royal Commission, and would recommend that the governments of Canada enact legislation providing for such in all industries where it is now established, by agreement, at the earliest opportunity, and after due investigation by a commission, composed of representatives of employers and employees representing the various industries, legislation be enacted by the governments of Canada providing for the same to be extended in all industries where it can be applied, having due regard to the curtailment of production and distribution."



Dr. D. Strachan

Who took a prominent part in presenting the employers' case to the Conference. Dr. Strachan is in charge of welfare work in the Imperial Oil Company's organization

The second subject of disagreement was the recommendation of the Royal Commission on Industrial Relations that the findings of the Commission be put into effect on all work controlled by the Government when the principles of democratic management can be applied.

(*a*) The following resolution was returned by the delegates representing the employers:

"The undersigned members of your Committee beg leave to report that the matter referred to them does not, in their judgment, come within their province, but that it is entirely a question between the governments and their employees concerned."

(*b*) The following resolution was returned by the delegates representing the employees:

"We concur in the recommendation of the Royal Commission on Industrial Relations that the findings of the Commission should be put into effect in all works controlled by all government bodies where the principle of democratic management can be applied.

"We further recommend that employees of all government bodies should be entitled to the right of appeal under the Industrial Disputes Act, so long as that Act remains upon the statute book of Canada.

"We further recommend that the wages and working conditions of employees of the governments should not be less favorable than those which now exist for similar workers in the employment of private individuals or corporations."

(*c*) The following resolution was returned by the representatives of the third group:

"The representatives of the Third Group on this Committee believe that, in so far as the findings of this Conference approve and such findings are to the benefit of the public weal, the suggestions of the Royal Commission should be put into effect in all departments and works controlled by the Government of this country."

The third subject of disagreement occurred in consideration of:

(*a*) Employees' right to organize.
(*b*) Recognition of labor unions.
(*c*) Right of employees to collective bargaining.

(*a*) The following resolution was returned by the representatives of the employers:

"Employers admit the right of employees to join any lawful organization.

"Employers should not be required to recognize unions or to establish 'closed shops.' Employers insist on the right, when so desired, to maintain their plants as 'open shops,' by which they mean that no employer should discriminate against any employee because of the latter's membership or non-membership in any organization, and no employee should interfere with any other employee because of the latter's membership or non-membership in any organization.

"Employers should not be required to negotiate, except directly, with their own employees or groups of their own employees."

(*b*) The following resolution was returned by the delegates representing the employees:

"Your Joint Committee, to whom was referred item No. 4 of the revised agenda, viz.:

"Consideration of—

(*a*) Employees' right to organize;
(*b*) Recognition of labor unions; and
(*c*) The right to collective bargaining;

respectfully submit the following report, with recommendations, for your favorable consideration:

"(1) With a view to effecting and maintaining harmonious relations between employers and employees, this Conference declares the following principles and policies, and urges their adoption by all employers relative to their respective employees:

(*a*) The right of employees to organize;
(*b*) The recognition of labor unions;
(*c*) The right of employees to collective bargaining.

"(2) In these recommendations, without changing the generality of their terms:

"(*a*) 'The right of employees to organize' means the right of employees to organize or form themselves into associations for lawful purposes.

"(*b*) 'The recognition of labor unions' means the right of employees, or their duly accredited representative or representatives, to recognition of their employer or employers, for the purpose of mutually arranging rules and regulations governing wages and working conditions.

"(*c*) 'The right of employees to collective bargaining' means the negotiations of agreements between employers or groups of employers and employees or groups of employees, through the representative or representatives chosen by the respective parties themselves.

"Entering into agreements and bargaining collectively with an association or union of employees does not mean recognition of the "closed shop," unless the agreement so provides.

"(*d*) 'Employer' or 'employers' as used in clauses 1 and 2, means any employer or employers of any industry and of federal, provincial and municipal governments.

"(3) 'That the federal and provincial governments be urged to enact legislation applicable to industries within their respective juridictions, to make it unlawful for any employer who shall discharge or refuse to employ or in any manner discriminate against employees merely by reason of membership in labor unions or for legitimate labor union activities outside of working hours."

(*c*) On this subject the representatives of the third group did not bring in any resolution.

Industrial Development Farmers' Best Friend*

By FINLEY P. MOUNT
President, Advance-Rumely Company

THE introductory portion of Mr. Mount's address was taken up with a discussion of the part played by food production both during the war and in the post-war period. He showed how serious was the food shortage in the war-ridden countries of Europe and how keen would be the demand for grain in Canada and the United States for years to come.)

Here, then, is our problem. These people must be fed, and their country and their power to produce must be restored, not only for humanity's sake, not alone for their own safety, but for our safety as well. Upon whom may the world better rely than on the American and the Canadian farmer? And to meet this demand in the future we would say emphasis should be laid upon the agricultural resources of Canada, for here indeed is the greatest room for expansion in production. Here you have in your prairie provinces three great empires, with possibilities of development so vast the human mind cannot encompass them. You are a great agricultural country now, but will be a greater. Your people will increase, your fields broaden, new homes will spring up, your herds will multiply; your farmers will diversify their crops; your methods of production will improve until your great neighbor on the south may well look to her laurels for agricultural primacy on this continent, and you and we will again take our places in the ranks shoulder to shoulder, to fight in peace as we fought in war, this time against hunger, the most powerful enemy of mankind, the destroyer of peace, the scourge of the world.

Successful Agriculture

And as successful agriculture constitutes the very foundation of a nation's prosperity, your future is well assured, and all the things which go with success and prosperity are secured unto you.

With agricultural development must come industrial development; the one is the concomitant of the other. It was so with us. It has always been so with our race. It must be so with you. You are especially blessed with the requirements for a great industrial development; your cheap fuel, your wealth of minerals and forests, are known and inexhaustible; your great and wonderfully efficient systems of railroad transportation. You in this province are fortunately situated to the market of the Orient. Many of us here, I predict, will see the day when the products of your country and ours will be loaded at the western ports of Lake Superior on ocean vessels bound through an enlarged ship canal for Liverpool and all the markets of the world, and closely competing in point of accomplishment and more economical during the season of its use will be your route through Hudson's Bay to all the seven seas.

Farmer's Best Friend

Your farmer must learn, as ours has long since learned, that industrial development is his best friend, and his best paying investment. As the market at his door increases, so will the value of his products and his farm increase. As new industries are built up in your communities, new opportunities for profit and enjoyment of life are created. Your foreign market for your agricultural products is now good, and it is reasonable to suppose it will be a good market for some time to come, but eventually your reliance must be on your home market. A home market is always a better market, a higher and a surer market, and for this reason, if no other, you should see to it that industrial enterprises are built up in each of your local communities. This should be done by building the things your communities most need, and the materials for which are nearest at hand. Do not start industries merely for the sake of starting industries. I have in mind cases in our own country where this was attempted, where, for instance, a rolling mill was started in a small county seat town, far removed from raw materials, and not especially convenient to markets or shipping. Under this same town a splendid quality of building stone, well known to the community, had lain for centuries undeveloped, though efforts had been made to interest local capital in its development. The community could not see the building stone enterprise, but was obsessed with the rolling mill

(*Continued on page* 78)

* From an address delivered before the recent Alberta Industrial Congress at Calgary.

News and Views of the Association

There will be found each month in this department a record of the various activities of the Canadian Manufacturers Association during the preceding month. The information is supplied to INDUSTRIAL CANADA officially, and all members of the Association are urged to acquire the habit of reading and checking over the contents of the department carefully in order to keep themselves posted on the work of the Association

Maritime Provinces Meetings

A meeting of the Executive Council of the Association was held in the Board of Trade Building, St. John, N.B., on Wednesday, October 1st. On the following day the semi-annual meeting of the Maritime Division took place in the same place. Owing to the fact that so many members of Council had attended the National Industrial Conference at Ottawa during the week of September 15th, the attendance from the west was not as large as it might otherwise have been. However, several members accompanied the president, Mr. T. P. Howard, to St. John, among them being C. Howard Smith, the Howard Smith Paper Mills, Limited, Montreal; F. W. Stewart, Cluett, Peabody & Co., Montreal; Jos. O. Picard, Rock City Tobacco Co., Limited, Quebec; Geo. D. MacKinnon, MacKinnon Steel Co., Ltd., Sherbrooke; H. W. Fleury, J. Fleury's Sons, Aurora; W. H. Shapley, Sterling Actions & Keys, Toronto; H. A. Telfer, Telfer Bros., Limited, Toronto; S. Harris, Harris Litho. Co., Limited, Toronto; Henry Bertram, John Bertram & Son Co., Limited; Geo. H. Douglas, Thornton & Douglas, Limited, Hamilton; M. R. Meldrum, Herbert Morris Crane & Hoist Co., Limited, Niagara Falls.

While a good many members of Council found it impossible to attend, the letters of regret received indicated a cordial approval of the idea of holding a meeting of council in the Maritime Provinces and a desire that the full benefits of Association work should be extended to the members in the Martime Division.

Following the meetings in St. John, a tour of the Provinces was undertaken by the president, Mr. T. P. Howard; the chairman of the Maritime Division, Mr. W. S. Fisher; several members of the executive council; and Messrs. J. E. Walsh, General Manager; J. T. Stirrett, General Secretary; J. K. R. Bristol, Manager of the Tariff Department and H. R. Thompson, Secretary of the Maritime Division, the Cities of Fredericton, Moncton, Halifax, Truro, Amherst, Sydney, Charlottetown and New Glasgow being visited. Meetings with the local members were held at all these points and much good was accomplished in bringing members into touch with the officials of the Association and enlightening them on the services available.

To Organize Quebec Division

A general meeting of all members of the Association within the Province of Quebec has been called by order of the President for Thursday, October 16th next, in the Windsor Hotel, Montreal, commencing at 10 a.m. This action is in accord with the amendment to the Association by-laws passed at the last annual meeting, by which a Quebec Division of the Association was created. Nominations for a divisional chairman, vice-chairman and an executive committee of twelve has been called for, and the election of these officers will take place in the meeting. Mr. J. E. Walsh, the general manager of the Association, will be present to open the business session with an address to the members, explaining the purposes for which the division is formed and outlining the activities which would properly come under its jurisdiction. The afternoon session will be devoted to the study of problems with which manufacturers are wrestling. It is hoped to have present men eminently qualified to introduce these subjects and the discussions should be illuminating.

The day will be completed by an informal dinner at 7 p.m., for which function the committee in charge have been fortunate enough to secure the attendance of Dr. Michael Clark of Red Deer. Dr. Clark will need no introduction, for he is known from coast to coast as one of the most brilliant and entertaining speakers in Canadian public life. Great interest has been evidenced in the announcement that Dr. Clark would speak and a capacity audience is already assured.

Retire from Committee

The terms of office as members of the Executive Committe of Messrs. H. H. Champ, Steel Co. of Canada, Limited and J. R. Shaw, Canada Furniture Manufacturers, Limited, expired in September and their successors were elected at the meeting of the Executive Council at St. John.

Ontario Shoe Manufacturers

The Ontario Shoe Manufacturers Association, which is a section of the Canadian Manufacturers Association, now holds quarterly meetings. October 8th is the date of the current meeting. Mr. G. W. McFarland, of Williams Shoe, Ltd., Brampton, is the chairman of this organization.

The Association is now dealing with such questions as the development of a form of technical training suitable to their business, and a modest but very real effort is being made to provide interesting lectures on underlying principles and practical demonstrations of the right way to perform the important operations in shoemaking. Lengthy reports have also been prepared on the value and desirability of a publicity and advertising campaign for "Made-in-Canada" shoes. A committee is also at work on the preparation of a cost estimating sheet, to enable manufacturers properly to analyse and trace their costs, no matter what line they may produce.

Arrangements are also being made to meet the shoe retailers' organization for the discussion of matters relating to the good of the trade as a whole.

The work of this section calls for so much investigation, correspondence and negotiation that it is being seriously proposed to have a secretary for the organization

who can devote his whole time to the shoe business. It is anticipated that the section will retain, through its secretary, the intimate connection that it has always had with the Canadian Manufacturers Association.

Protecting Association's Crest

As attempts have been made at various times to infringe the special crest of the Association, steps have been taken recently by the Legal Department to secure protection. It may now be stated that the crest is registered as a specific trade mark under the provisions of the Trade Mark and Design Act. Action has also been taken to protect the name "Canadian Trade Index" by registering the title under the terms of the same act.

Spoke on the Tariff

Mr. J. K. R. Bristol, Manager of the Tariff Department, was a guest at a dinner meeting of the Purchasing Agents' Association of Toronto, held at the King Edward Hotel on September 17th. He addressed the Association on the subject,—"The Reason for a Tariff, the Recent Changes in the Tariff and the Future Outlook." As the subject is one of special interest to members of the Association, the address is reproduced in this number of *Industrial Canada.*

Export Publication Received

There has just been received in this office the first number of the "British Standard Exporter." The present volume is devoted to leather, earthenware and hardware, except metal hardware. This is the first of a series dealing with the British industries which are catering to the export trade. The series, when complete, will consist of twenty-five large volumes, each replete with illustrations, descriptions and, in some cases, prices of the different articles listed. Much useful information regarding telegraphic communication is also given, and the series should be of real value to business people interested in getting goods from British sources.

Progress on Trade Index

The compilation work of the new edition of the Canadian Trade Index has been completed and about one-third of the book is now in the printers' hands. In this edition there will be listed approximately 9,500 manufacturers, while about 2,200 new headings have been added. The total number of headings showing articles manufactured is now 8,445. Numerous rearrangements of headings have been made to make the information more readily available to users.

In addition to the usual French translation section, a translation into Spanish of all the headings has been provided. Useful statistics showing the value of imports, exports and production of various kinds of goods have been prepared for insertion, together with the usual lists of consuls, trade commissioners, etc.

Considerable difficulty has been experienced in keeping up to the schedule, as it was found impossible to get as numerous a staff together who were satisfied to do temporary work, and at the same time be trusted to take the necessary care with the wealth of detail involved. In the later stages not only care is necessary, but actual knowledge of the system, symbols and the names of the manufacturers, so in those stages inexperienced help is a hindrance rather than a valuable and time-saving assistance.

We have also been hampered by the extraordinary number of changes in names of firms. Such changes involve the rewriting of the whole part of the book wherever their names appear. The changing back from war to peace conditions and the consequent change and addition to the lines of goods manufactured caused an amount of clerical work that was abnormal. Some difficulty was also experienced in getting returns from those eligible for entry in the book. In each of these cases the firms had to be checked up in rating books, telephone books and other directories, or by correspondence with the firms themselves or with someone in their neighborhood to determine whether they were still in operation or not. All these have now been successfully overcome, and the matter of speedy production now rests with the printer.

It is assured that besides a very extensive Canadian circulation among manufacturers, wholesalers, railways, Government departments and other heavy purchasers, the distribution of the index in British and foreign countries will be large and so placed as to render most effective publicity and sales service to Canadian industry.

Visit to Peat Fuel Plant

Representing the Special Fuel Committee of the Association, Messrs. W. H. Shapley and R. L. McIntyre of Toronto, accompanied a small inspection party, headed by Hon. G. H. Ferguson, to the Ontario Government's experimental peat plant at Alfred, near Ottawa, on September 15. The Association's delegates report that, as far as they could see, after an examination of the work being done, the money already spent in development has been used to good advantage, and that progress is being made. The experimenters appear to have reached the right principle of operation, and it will be mainly a question of solving the problem of transportation. The thanks of the Fuel Committee have been extended to Hon. Mr. Ferguson for the invitation given and courtesies extended to their representatives on the trip.

Toronto Branch Dinner

A dinner and meeting of the Toronto Branch was held in the Board of Trade lunch rooms, Toronto, on the evening of Friday, September 26, for the purpose of hearing and discussing a report on the National Industrial Conference. The chairman, Mr. C. W. Coulter, presided. A comprehensive report dealing with the work of the Conference was presented by Mr. H. Macdonald, secretary of the Branch, after which speeches dealing with various phases of the event were delivered by Mr. J. S. McKinnon, vice-president of the C.M.A.; Mr. Melville White, Dr. Strachan, Mr. S. R. Parsons, Mr. A. Munro Grier, K.C., Mr. J. P. Bell, general manager of the Bank of Hamilton, and others From the remarks of these gentlemen an excellent idea of the proceedings at the Ottawa Conference was derived. Several of the speakers referred with gratification to the part played by the C.M.A. in organizing and handling the employers' side of the argument.

Explained the Sprinkler Campaign

At the September meeting of the Insurance Committee, Mr. Grove Smith, the Dominion Fire Commissioner, gave some interesting information in connection with the sprinkler campaign now being inaugurated by the Dominion Insurance Department in conjunction with the Dominion Fire Prevention Committee. Mr. Smith stated that arrangements had been made by which any factory in Canada could be inspected by an expert sprinkler engineer, sprinkler layouts drawn up and the cost of the installation submitted to the manufacturer, together with a statement of the annual savings in insurance premiums which would be effected. All this would be done free of

charge and without any obligation on the part of the manufacturer. It was confidently expected that very many manufacturers would see the wisdom of installing this system of protection once the profitable nature of the investment was demonstrated to them. The arrangements made assured the lowest possible cost of installing the equipments, without in any way interfering with competition between the various sprinkler companies. The object of the Insurance Department in carrying out this campaign is, of course, the reduction of Canada's fire waste. It is estimated that, if every factory in the Dominion were equipped with automatic sprinklers, the country's annual fire waste would be reduced by at least fifty per cent.

New Members of Committee

At the organization meeting of the Transportation Committee, held on September 9, the following additional members were appointed to the Committee:—

C. E. McGhie ..... The Welland Vale Mfg. Co., Ltd., St. Catharines, Ont.
W. R. Ingram ..... Swift Canadian Co., Ltd., Winnipeg, Man.
J. E. McFarlane ..... Western Canada Flour Mills Co., Ltd., Toronto, Ont.
A. H. Thorpe ..... Wm. Davies Co., Ltd., Toronto, Ont.
M. F. Gibson ..... National Fireproofing Co. of Canada, Toronto, Ont.
A. H. Brittain ..... Maritime Fish Corporation, Montreal, Que.
H. T. Diplock ..... Steel Company of Canada, Ltd., Montreal, Que.
F. G. Daniels ..... Dominion Textile Co., Montreal, Que.
L. L. Anthes ..... Anthes Foundry Co., Toronto, Ont.
Norman Boyd ..... Gutta Percha & Rubber, Ltd., Toronto, Ont.
Robin Boyle ..... Provincial Stone Co., Toronto, Ont.
John F. Ellis ..... Barber-Ellis, Ltd., Toronto, Ont.
S. R. Parsons ..... British American Oil Co., Toronto, Ont.
W. S. Campbell ..... Canadian General Electric Co., Peterborough, Ont.
Geo. Henderson ..... Brandram-Henderson, Ltd., Montreal, Que.
H. R. Silver ..... H. R. Silver, Ltd., Halifax, N.S.
Angus McLean ..... Bathurst Lumber Co., Bathurst, N.B.
A. H. Whitman ..... Robin, Jones & Whitman, Ltd., Halifax, N.S.
T. H. Estabrooks ..... T. H. Estabrooks Co., Ltd., Halifax, N.S.
B. W. F. Johnson ..... B.C. Sugar Refining Co., Vancouver, B.C.
J. R. Duncan ..... Vulcan Iron Works, Vancouver, B.C.
J. E. Hale ..... Vancouver Milling & Grain Co., Vancouver, B.C.
J. J. Palmer ..... Clayburn Co., Ltd., Clayburn, B.C.
J. H. McDonald ..... B.C. Manufacturing Co., Ltd., New Westminster, B.C.
A. S. Capwell ..... Canadian Blower & Forge Co., Ltd., Kitchener, Ont.
J. H. Baetz ..... Baetz Bros.' Furniture Co., Kitchener, Ont.
Chas. O. Shaw ..... Anglo-Canadian Leather Co., Ltd., Huntsville, Ont.
Chas. Waterous, Jr. ... The Waterous Engine Works Co., Ltd., Brantford, Ont.
F. A. Nancekivell .... The Ford Motor Co. of Canada, Ford, Can.
A. Kinzinger ..... Kinzinger, Bruce & Co., Ltd., Niagara Falls, Ont.

Trade Sections Department

There has been unusual activity amongst Trade Sections during the summer months. No less than twenty-seven meetings have been held since the beginning of July, in which sixteen different groups participated.

The Trade Sections Department is constantly on the watch for motives of peculiar trade interest which may warrant the calling of groups together, but in this respect members can be of great assistance by supplying the department with information in respect to which collective action may be appropriate. It is desirable that every separate branch of industry should feel that on matters of common interest facilities for getting together are always available, it being the duty of the Trade Sections Department to supply for the asking the necessary secretarial and organizing service.

A classification of Canadian industry has been prepared, dividing manufacturing processes into eleven main groups on general lines and sub-dividing into sixty groups along particular lines. This grouping system has been designed to adapt itself to the system of grouping in the Canadian customs tariff, the general classification in the Canadian census returns, the grouping system indicated in organizations in all countries, and includes all Trade Sections and Associations already organized in Canada.

There are factors in every branch of industry which may with advantage be dealt with collectively, and it needs but the suggestion of a motive to set the machinery in operation to bring manufacturers in similar lines of production together in any of the centres in Canada in which the Association maintains a staff.

It is hoped that manufacturers will avail themselves of the facilities at their disposal.

Company Test Cases

Reporting on the situation as regards company law, the Legislation Committee states that,—

"His Majesty's Privy Council has granted leave to appeal in the cases involving the validity of the company licensing acts of Saskatchewan, Manitoba and Ontario, the several cases to be consolidated and heard together. This fact and the comments of their Lordships on the hearing of the application for leave indicates that the end aimed at in bringing these cases is likely to be attained, viz.: that the whole subject will be taken up on a broad basis which will insure a determination of the questions at issue not only for the province directly concerned, but for other provinces as well. It will be remembered that the cases were instituted and carried as far as the Supreme Court of Canada by the Canadian Manufacturers Association. This was as far as the Association felt justified in going. Arrangements have now been made by some of the companies interested to finance the further prosecution of the appeal, and the Dominion Government will be represented as intervenent and will bear part of the expense. It is not yet known whether the cases will be heard at the November sittings or whether they will be held over until the spring."

Many Visitors to the Office

During the past two weeks the Commercial Intelligence Department of the Association has been favored with visits from a large number of business men from Canadian points and from different parts of the world. The Department has had great pleasure in enabling them to get in touch with many members of the Association with a view to promoting business. Among those who visited the office were the following:—

Mr. B. Willoughby, Managing Director of Willoughby & Co., Limited, Sydney, Australia; Mr. H. L. Jones, of Jones, Sweet & Co., Import and Export Merchants, Shanghai, China; Mr. H. S. Hart, of Dimond & Hart, Wellington, New Zealand, Wholesale Merchants; Mr. H. A. Barron, of H. A. Barron, Limited, Cape Town, South Africa; Mr. Stamos Zographakis, the Trade Commissioner in Canada for Greece; Mr. M. E. Reich, representing commercial interests in Czecho-Slovakia; Mr. Miles Nelson, of Auckland, New Zealand and Melbourne, Australia; Mr. John J. Matveenoff, of the Russian-America Trade and Industry Development Corporation, New York; Mr. W. C. Simpson, of the Robinson Shields Company, London, England; Capt. P. C. Hollingsworth, of John Lofthouse & Company, London, England, and many others.

Workmen's Compensation Boards Convene

The Association was represented at the Sixth Annual Convention of the International Association of Industrial Accident Boards and Commissions, which was held in the King Edward Hotel, Toronto, on September 23-26, by Messrs. Sam Harris, chairman Legislation Committee; W. C. Coulter, chairman Toronto Branch; R. L. McIntyre and H. Macdonald, legal secretary. The conference, which was presided over by Mr. George A. Kingston, commissioner of the Workmen's Compensation Board of Ontario.

dealt with a large variety of subjects affecting classification of industries, statistics on accidents, compensation insurance cost, cost of medical and hospital treatment by nature of injury, etc. Mr. Samuel Price, chairman Workmen's Compensation Board of Ontario, stated that in Ontario last year only 1½ per cent. of all assessments paid by employers—excluding the amount expended by them in safety work—went toward expenses; the other 98½ per cent. was for actual benefits to the workmen, and none was needed for litigation or legal fees. Mr. A. H. Young, manager Industrial Relations, International Harvester Company, spoke on "Co-operative Representation of Employees in Industrial Policies," describing the work done by the company.

Dominion Bankruptcy Act

Reviewing developments leading up to and following the enactment of the Dominion Bankruptcy Act, the Legislation Committee in its report to the Executive Council says,—

"After discussion in the Canadian Parliament during two sessions and preliminary preparations extending over several years, a Federal Bankruptcy Act was passed in the 1919 session, which may be regarded as a factor in the readjustment incidental to the war. During the course of the bill, our Legal Department, through our Ottawa office, kept in close touch with the Government and with other public bodies upon the subject, with a view to safeguarding the interests of manufacturers. We are glad to state that we were able to introduce very important amendments which are incorporated in the act and which will contribute to the greater protection of creditors, in line with the legislation of other countries.

"Amongst these amendments we particularly urged the adoption of provisions for proper accounting by and discharge of trustees in bankruptcy, and procured the enactment of effective clauses providing that unclaimed dividends shall be deposited by the trustee with the Minister of Finance, to be afterwards available to creditors entitled thereto, with accrued interest thereon.

"Your legal secretary prepared and issued to all our members a digest of the act in circular form, many expressions of appreciation of which were received, as well as numerous requests for additional copies for the use of branches in both Canada and the United States.

"The old assignment acts of the various provinces will become non-effective as soon as the Governor-General has proclaimed the new act. This will be done when the general rules, which are now being drafted, are completed, which will be sometime about November."

Engineering Standards Association

At a meeting on September 8 of the main committee of the Canadian Engineering Standards Association, in which the Canadian Manufacturers Association is represented, the following new members were appointed:—J. M. R. Fairbairn, nominated by the Canadian Pacific Railway; H. G. Kelley, nominated by the Grand Trunk Railway; A. F. Stewart, nominated by the Canadian National Railways; F. A. Gaby, nominated by the Hydro-Electric Power Commission of Ontario; A. A. Dion, nominated by the Canadian Electrical Association, and J. Stadler, nominated by the Canadian Pulp and Paper Association.

Lists of members for the following sectional committees were approved:—Electrical, chairman, Dr. L. A. Herdt; steel bridges and construction, chairman, G. H. Duggan; wire rope, chairman, Professor H. M. Mackay.

Recommendations as to membership of the following sub-committees were received and the committees appointed accordingly:—Steel railway bridges, chairman, P. B. Motley; incandescent lamps, chairman, John Murphy; transformers, chairman, A. A. Dion.

The Secretary reported the progress made with regard to various questions already under consideration, and further reported a number of requests for action on the part of the Association. Several of these were approved for further enquiry and report.

The Chairman then welcomed Mr. C. Le Maistre, the Secretary of the British Engineering Standards Association, who is now on a visit to Canada and the United States. Mr. Le Maistre described briefly the work of the B.E.S.A., and drew the attention of the Committee to certain matters in which his Association would welcome the assistance and co-operation of the Canadian Engineering Standards Association, referring especially to proposals which have been made with a view of obtaining some degree of Anglo-American agreement as to screw-thread standards. Mr. Le Maistre further pointed out the desirability of international agreement as to rules affecting electric appliances and fittings, particularly for interior use.

As regards the first suggestion, it was decided to appoint a sub-committee on screw threads, with instructions to consider and report on Mr. Le Maistre's communication.

Considerable discussion took place on the question of rules for electric appliances, and the committee agreed that the formulation of a Canadian electric code was most desirable. The committee then directed that a sub-committee should be called together to enquire and report further as to this point.

Catalogue and Sample Room at Liege

The Association has been furnished with a memorandum reviewing the work for the past six months by the Catalogue and Sample Room at the British Vice-Consulate at Liége. Owing to the impossibility of providing a special employee for the section, the room has only been open for two hours a day and five days a week, but, during the last 125 days under review, the number of visitors has aggregated 735, 330 prospective buyers of British goods and 463 applicants for British agencies have also been dealt with by correspondence.

The response of British firms for catalogues and samples of small bulk has hardly fulfilled expectations, but it is to be hoped that an important increase in the number received will be assured, as the facilities which this organization provides for bringing British products to the notice of Belgian buyers are realized. It should hardly be necessary to state that catalogues for Belgium should be in French if possible, with metric measurements, etc. The number of firms who have sent publicity matter up to date is slightly in excess of 300.

The organization described above being largely in the nature of an experiment, the continuance and development of which must depend upon the results attained, it is urgently requested that all firms who succeed in doing business by means of the publicity offered them should notify the fact to the British Vice-Consul, Liége.

Swiss Delegation Coming to Canada

Arrangements have been made between the Canadian Mission, London, and the Government of Switzerland in regard to a visit of a Swiss delegation to Canada. The delegation includes representatives for the special study of:—(*a*) Government Administration; (*b*) Universities—Arts and Sciences; (*c*) Medicine—Hospitals; (*d*) Banks; (*e*) Board of Trade; (*f*) Architecture; (*g*) Hotel Management; (*h*) The Press; (*i*) Commerce and Industry.

The Canadian Mission states that about ninety of the three hundred delegates will visit Canada and that the

majority of these delegates are interested in matters concerning trade and industry.

It is expected the delegates will enter Canada via Niagara Falls, between October 1st and October 15th, and will remain in Canada about two weeks. The Canadian Trade Commission, Ottawa, will make the necessary arrangements regarding the tour through Canada, with Mr. Oscar Bosshard, the Commissaire of the Bourse Suisse du Commerce of Berne, who will accompany the delegation.

Trade With Jamaica

At its last meeting the Tariff Department considered a letter from E. A. H. Haggart, Kingston, Jamaica, which deplored the reduction in Jamaica's purchases from Canada. The percentage of her purchases from Canada, the United Kingdom, the United States and other countries in each of the years, 1877, 1887, 1897, 1907, 1917, was as follows:—

	1877	1887	1897	1907	1917
Canada	13.9%	5.6%	7.2%	5.5%	6.7%
United Kingdom ..	50.7%	62.0%	46.7%	47.4%	19.5%
United States	31.6%	28.3%	43.3%	43.6%	70.1%
Other Countries ..	3.8%	3.1%	2.8%	3.5%	3.7%

Jamaica's sales to Canada, the United Kingdom, the United States and other countries, are in the following ratio:—

	1877	1887	1897	1907	1917
Canada	.005%	1.31%	1.11%	7.88%	15.03%
United Kingdom ..	79.46%	38.62%	25.97%	22.37%	45.20%
United States	15.4%	43.93%	57.96%	55.60%	28.22%
Other Countries ...	5.31%	16.12%	14.93%	13.12%	11.25%

It will be seen from the foregoing that Jamaica's purchases from British countries have been steadily dwindling. Over 70 per cent. of her requirements are now purchased in the United States. On the other hand, the sales of Jamaican products to British countries have been steadily increasing, so that now the greater proportion of her sales are to British countries. The products of any British country entering Jamaica are subject to the same rate of duty as would apply on like goods entering Jamaica from the United States. On the other hand, Jamaican products entering Canada are admitted throughout at the lowest British preferential tariff rates provided in the tariff of Canada. In the circumstances the Tariff Committee directed that these facts be brought to the attention of Mr. Haggart, in order that he might take the matter up with the Jamaican authorities, in the hope that they may be persuaded to participate in the policy of strengthening national ties between British countries by extending preferential tariff treatment to British goods.

Stratford Manufacturers Visit West

Six furniture manufacturers of Stratford, Ont., have recently completed a tour through Western Canada. They visited all the important centres as far as Victoria, B.C. They report that they see great business possibilities in the future of Western Canada. Many discussions were held with western dealers and a great many common problems were discussed. Considerable benefit resulted from the interchange of opinions, personally, and a great deal of valuable information was secured. The visit by manufacturers representing the same trade to Western Canada —or, in fact, to other parts of Canada—cannot fail to produce excellent results.

The Stratford manufacturers who made the trip West are as follows:—D. M. Wright, president of Geo. McLagan Furniture Co.; H. W. Strudley, president of Imperial Rattan Co.; W. J. Anderson, president of Stratford Chair Co.; F. M. Gifford, president of Farquharson & Gifford Co.; Chas. A. Moore, president of Stratford Mfg. Co.; F. W. Trebell, manager of Kindel Bed Co.

Textile Manufacturers Meet

Under the auspices of the Canadian Textile Institute and the Canadian Woollen Manufacturers' Association, which is now a section of the C.M.A., a meeting of textile manufacturers was held on September 6, in Toronto, to hear an address by Professor Barker, of Leeds University, who had just completed a tour of Canadian mills. Prof. Barker outlined the policy as regards technical education, which he believed that Canadian manufacturers should adopt. Prior to the holding of this meeting, the Canadian Textile Institute held its annual meeting at the King Edward Hotel, at which there was approved a memorial to the Government on the subject of technical education. In the evening a banquet was held, at which technical education was again to the fore, speeches being delivered by Professor Barker, Hon. Dr. Cody, Sir Robert Falconer and others.

Recent Activities of the Montreal Branch

By W. P. HUGHES
Secretary, Quebec Division, C.M.A.

MONTREAL BRANCH members are manifesting an increasing appreciation of the value of group conferences. During September sixteen trade group meetings were held in the branch board room, while requests for board room reservations already extend over the first two weeks in October. This is considered a most encouraging development, for co-operative study of common difficulties is without doubt the most valuable method of solving the many problems with which manufacturers are faced in this period of far-reaching readjustments. It is the policy of the branch executive to afford every possible facility to the members for such group meetings, and they are following the increase of interest manifested with a great deal of satisfaction.

The September meeting of the Executive Committee, which was held in the Engineers' Club, on Thursday, September 18th, was well attended and definite plans were drawn up for the year's activities. The Reception and Membership Committee, under the able leadership of Mr. F. W. Stewart, submitted a comprehensive programme, covering two important aspects of branch endeavor. The first was a series of general meetings, to be held every two months throughout the season. Mr. Stewart reported that it was the intention of the committee to secure speakers whose prominence and ability would insure deep interest on the part of the members.

He intimated that already negotiations were under way to obtain such outstanding speakers as Sir Henry Drayton, Minister of Finance; the Honorable Mackenzie King, newly elected leader of the Liberal party; E. W. Beatty, President of the C.P.R., and Dr. Michael Clark, of Red Deer; and stated that he confidently expected these negotiations would be successful. He announced that it had been decided to set apart at least one evening during the winter for a purely

A WARNING

Information on the best authority has been received stating that the publication of the "Echos de l'Exportation" is a German paper, although edited in France. We would warn Canadian manufacturers against this publication. It is apparently a medium of economic espionage run for the benefit of German trade in France.

"get acquainted" gathering of the members, on which occasion smokes and general entertainment would alone be in order.

The other important development disclosed by Mr. Stewart's report was a thorough membership campaign. It was possible, he explained, to secure new members from two sources. First from the comparatively small number of manufacturers within the jurisdiction of the branch, who were not already members and secondly from a campaign carried on among our present members, to the end that additional memberships be taken out by them. The committee, he affirmed, were already at work and had encouraging results to show.

A list of the firms deemed eligible for membership had been completed and arranged according to location. A personal letter had been sent to each of these, extending a cordial invitation to them to become members, intimating that if a reply in the affirmative had not been received within a reasonable delay, a member of the committee would call upon them, and that it was hoped they would have the application blank sent them filled out pending such a call. Each of the members of the committee had taken some eight or ten of these prospects and the actual canvass was well under way.

Additional Memberships

With regard to additional memberships from firms already members, the committee had felt that it was highly desirable to have as many as possible of the men who were actually engaged in the various departmental activities of big businesses available for the Association study of particular problems. These men could bring to committee work the expert knowledge which they had acquired in their daily work, and so the questions would be much more intelligently discussed and the results would undoubtedly be much more beneficial to the members at large. It seems reasonable, Mr. Stewart suggested, that such a committee would understand a problem much more thoroughly and be in a position to suggest remedies much more effectively than would a group not so intimate with the subject. In securing the additional memberships it would be suggested that the company signify the particular department in which the additional representative was engaged. This information would be collected for ready reference.

Fifteen applications had been examined by the committee to date, and had received the approval of the Membership Committee. Upon motion of Mr. Stewart, seconded by Mr. Miner, these were unanimously passed by the Executive Committee and recommended to the Central Executive for final adoption. The companies and names of representatives thus passed were as follows:

Lockwood, Greene & Co., of Canada, Ltd.; Mr. E. G. Horne.
Precision Tool & Machine Co., Ltd.; Mr. G. M. Smith.
Salem Oil & Grease Co., of Canada, Ltd.; Mr. E. F. Richards.
Legare Auto & Supply, Ltd.; Mr. L. T. Fogust.
Lymburner Brass Works, Inc.; Mr. J. L. Murphy.
Herald Press, Ltd.; Mr. T. A. Tod.
La Compagne Marchand Freres, Ltee.; Mr. O. Marchand.
Thos. V. Bell, Ltd.; Mr. Thos. N. Bell.
International Machinery & Supply Co.; Mr. W. J. Carrigan.
Second representative, Mr. J. T. Dohm, 2nd membershi
Third representative, Mr. R. J. Hiller, 2nd membershi
Nichols Chemical Co., Ltd.; Mr. C. H. Lyons, 2nd membershi
Berliner Gramophone Co., Ltd.; Mr. R. S. Chilvers, 2nd mer bership.
Riordon Pulp & Paper Co., Ltd.; Mr. A. D. Huff, 2nd mer bership.
Algoma Steel Corporation, Ltd.; Mr. G. A. Irwin, 2nd mer bership.

Eminent Montreal branch members were present in Ottaw attending the Conference on Industrial Relations. Sever of these directly represented branches of industry, as th nomination of the Association, while others were present i some other capacity. T. P. Howard, as President of th Association, was in daily attendance, and among those at th conference were Carl Riordon, of the Industrial Relation Commission; John Lowe, connected with the Governmer Labor Sub-Committee; A. H. Brittain, of the Canadia Fisheries Association; Mark Workman, R. H. McMaster an H. E. Rice, representing the Steel and Iron Industry; F. C Daniels, the Cotton Industry; F. P. Jones, manufacturers c clay, glass and stone products; R. E. Jamieson, the Rubbe Industry; Wm. Rutherford, the Lumber Products Industry.

A full report of this conference is being sent to ever member through arrangements effected by the head office, an will be studied with interest when it arrives.

Commercial Intelligence.

The branch office has been the centre during the mont of much activity in disseminating commercial intelligence both as to domestic and foreign trading possibilities. No les than nineteen representatives of foreign buyers and importer have visited the office in quest of information as to source of supplies of this or that commodity. In a number of case there is good ground for stating that satisfactory busines has resulted to the manufacturers from this service. A con scientious attempt has been made to investigate the standin and experience of men who have come looking for agencies Names of members have been given them with a view to pro tecting the members from the irritation of demands upo their time by inexperienced and unqualified persons desirin to establish themselves.

Offers Five Hundred Dollars

Toronto Publication Holds Competition to Determine How Sales-Costs May be Lowered

An opportunity for those who have ideas to offer as to how sales-costs can be lowered in order to off-set the present clamor against the high cost of living, is afforded by the editor of *Marketing*, a monthly magazine devoted to the problems of selling and advertising in Canada and published in Toronto. Five hundred dollars in prizes are offered for the best articles dealing with any phase of selling or advertising containing practical answer to the problem. There will be six awards in all, the best article receiving $150; the next best $100; the two next best $75 each and the fifth and sixth in order, $50 each. Articles of about 2,500 words are desired, though they may be longer, and they should reach the editor of *Marketing* not later than November 1.

Justification of Made-in-Canada Movement*

Essential that Canada's Revenues Should be Conserved and the Most Made Out of Her Productive Possibilities in Order that She May be as Nearly as Possible Self-Supporting

By T. P. HOWARD

President, Canadian Manufacturers Association

WHEN I received an invitation to address you, I hesitated, for it seemed to me that I must first decide whether or not I had a message that would be germane to the nature of your interests and deliberations. You are a group of busy men, and therefore it would be a waste of time and a failure on my part to appreciate the fitness of things did I consent to come before you without something practical to say.

Your business is to buy. As buyers you represent a determining factor in the distribution of demands for production. To illustrate what I mean, let us say that two million pairs of shoes are needed for the people of Canada during the next six months. This would constitute the demand for production of boots and shoes for that period as far as Canada is concerned. But how is this demand distributed among sources of supply? What factories participate in this production? These questions can be answered only by buyers. They decide these matters, and in so doing, they distribute this demand for production of boots and shoes; and so it is with all demands for production. When you give an order for five thousand tons of flour, or for five thousand yards of piece goods, or for any quantity of any commodity, be it large or small, you are distributing just that much of the demand for production in that particular line of goods. It is so important to Caaada, especially at the present moment, that this distribution of her demands should be as far as possible within her own borders that I feel a real opportunity presents itself to me in the invitation to come here this evening. I want, therefore, to speak to you plainly as distributors of Canada's demands for production on the subject of the vital relationship which exists between that distribution and the economic and social welfare of our country, for it is this relationship which justifies a Made-in-Canada movement.

Buy to the Best Advantage

I recognize that your judgments in this distribution are of necessity controlled primarily by comparison of possible sources of supply. It is your chief concern as wise purchasing agents to buy to the greatest advantage from the standpoint of the organization you represent. This must always be true, and it is with no attempt to minimize this fact that I ask you to consider what is involved when you place your orders, and thereby distribute Canadian demands for production. In terms of money, millions of dollars are annually directed into this or that industry, to one or another section of this country, or to some country other than our own. But money is only a standard of value. Translated into its values, it represents, in the last analysis, food, clothing, shelter, in short, those things which are necessary to sustain individual life and to make that living attractive; to an industry, community or a country, it means social health, prosperity and development. Orders insure busy factories, busy factories an abundance of employment, and when the citizens of a country are wisely and profitably employed, that country is on the road to national prosperity. These truths are so self-evident and so commonplace that they are of the nature of platitudes, but they are facts which we as Canadian citizens to-day should ponder well.

An Appalling Obligation

Canada, as well as other nations who were engaged in the war, is facing a tremendous increase in national debt and expenditure. In five years our debt has jumped from $43.49 to $160.72 for every man, woman and child in the Dominion. The carrying charges on this debt, including interest and sinking funds, have advanced from $1.96 per capita in 1913-14 to an estimated $12.16 per capita for 1919-20. During the war period, expenditure on consolidated fund account has risen from $127,384,473, to an estimated $351,785,491, for the current fiscal year. In the same period capital expenditures have jumped from $37,180,176 to an estimated $85,893,581, exclusive of war expenditures, which are for the fiscal year estimated at $296,696,614. This is an appalling financial obligation, which can only be met by strictest economy in the use of our revenues and by maximum realization of our resources.

What would you say of a family that had incurred a debt relatively as large and yet paid out a considerable portion of the family income for work while several members of the family did no work, or worked only part of the time, because there was not enough work to go around? Or what would you think of the business acumen of this family if they did only the rough and menial labor themselves, and handed over all the profits accruing from producing the highly finished product to outside workmen no more skilful than themselves? And yet the analogy between such a family and a country in the position of Canada is complete. That is just what Canadians are doing when they import more than they need to import, viewed from their own productive capacity, or when they ship out of the country the raw products of farm, forest or mine, and buy the same materials back in their fully manufactured state. It is just as poor management of the affairs of our nation and just as great a failure on the part of her citizens to conserve her revenues as it would be in the case of that family.

Conserve National Income

You will agree, I think, that it would be poor business at any time for a family or a country to conduct its affairs in such a fashion, and under the financial obligations described that it would be nothing short of utter folly. If you were that family's adviser, would you not counsel them to conserve the family's income by first exhausting their own powers of work before they employed others to help them, and would you not insist that the only sensible thing for them to do would be to get for themselves all the profits that their brains and skill could create? This is precisely the

*An address delivered before the Purchasing Agents' Association, of Montreal and District, at the Corona Hotel, Montreal, September 9, 1919.

counsel which a large number of prominent Canadian citizens are urging in the Made-in-Canada idea.

Other countries, some of which are by no means as relatively burdened with debt, realize the wisdom of this counsel. Throughout the world there is a pronounced economic movement towards the development of home markets, and steps have already been taken by the leading nations to accomplish this through increased protection of those markets. Canada alone stands in the unenviable position of being faced with an organized class demand for lower protection. In the United States no less than twenty-two bills have been introduced in the House of Representatives this session calling for higher protection. It is significant that among these measures two bills demand repeal of the Reciprocity Act. The attitude of the American farmers towards Canadian competition was indicated in a recent speech by Mr. George M. Young, Representative from North Dakota, and the father of one of the anti-reciprocity bills, Mr. Young said in part:

Americans Demand Protection

"The Underwood law did not get well under operation before the European war began. The conditions created by that war have acted as a high protective tariff. Then we get back to peace conditions . . . . . the American farmers will raise a howl which, by comparison, will make the roar of protest against Canadian reciprocity seem like a feeble murmur. In other words, when the farmers really find out that the Underwood law lets down the bars as to agricultural products to a much greater extent than Canadian reciprocity, they will throw the men responsible for it higher than they did Mr. Taft."

As the American farmers are demanding protection, so manufacturers are asking for higher duties and there is a marked tendency to keep the American market for the American people.

In France, as the result of a decree of July 8th abrogating that of June 14th relating to *ad valorem* surtaxes on imports, increases in French protective duties will range as high as two hundred per cent. This simply means that France says we will conserve every last franc of our revenues that we can, by doing as much of our reconstruction work as we are able to do. We will import only those things that we cannot ourselves produce, and in that I submit she is wise.

In the British Empire, Great Britain, while committed to Imperial preference, is restricting imports and protecting home industries. Acting Premier Watt, of Australia, has announced the introduction of a measure for higher protective duties. The Premier of South Africa has stated that the revenue tariff of that country will be increased to protect home industries. Japan is imitating pre-war Germany, and is following an extreme policy of protection. Practically every leading statesman of Brazil has declared and voted for a stiff protective tariff, and the country is solid for such a measure.

Revival of Movement

In Canada, in spite of the opposition referred to, there is a widespread revival of the Made-in-Canada movement. The present unfavorable balance of trade with the United States gives stimulus to this spread. Canadian money is at a discount of 3½ per cent. in New York, and in some of the border cities, merchants have taken as high as 10 per cent., while 6 per cent. is a general rule. It is recognized that the exchange situation can be corrected only by the adoption of a national policy of buying Canadian goods and encouraging Canadian industries. If Canada had manufactured at home the commodities imported during the last fiscal year, employment would have been given to more than 100,000 people, and approximately $100,000,000 that went to other countries would have remained in Canada. While I do not mean to imply that a total conservation of these revenues was possible, yet I do maintain that much was needlessly imported. Employment at good wages for thousands of workmen and millions of dollars were thus unnecessarily lost to Canada.

In a special appeal for the purchase of Made-in-Canada products, the Western Committee of the Canadian Reconstruction Association recently published a long list of such imports with an estimate of the additional number of Canadian workers for whom permanent employment would have been provided, and the corresponding addition to the pay-roll of Canadian factories, had these goods been manufactured at home. Here are a few of them:

Commodities.	Value of imports into Canada for home consumption during fiscal year ended March 31st, 1918.	Estimated number of permanent additional Canadian workers for whom employment would have been provided if imported products had been manufactured here.	Estimated addition to pay-roll of Canadian factories if imported products had been produced in Canada.
Boot, shoe. shirt and stay laces.	$275,591	65	$57,00
Boots, shoes and slippers, except rubber, etc.	414,822	95	85,00
Brooms and brushes	670,623	155	135,00
Candles	160,330	37	33,00
Carpet sweepers	103,203	25	21,50
Combs	173,289	40	35,00
Corsets, clasps, etc.	390,132	90	81,00
Cotton, manufactures of	35,230,546	8,100	7,200,00
Curtains trimmed or untrimmed.	357,328	82	73,00
Elastic	154,229	35	31,00
Furs and manufactures of	936,029	236	189,00
Gloves and mitts	1,688,944	425	340,00
Hats, caps and bonnets	3,354,440	771	680,00
Knitted goods of every description	230,296	53	47,00
Silks and manufactures of	13,848,395	3,183	2,800,00
Wool and manufactures of	24,004,193	5,517	4,900,00
Total	$81,992,390	18,909	$16,707,50

Is that kind of business management calculated to provid our country with funds necessary to pay our debts? Eightee thousand nine hundred and nine outside workmen were em ployed, receiving $16,707,500, to produce commodities fo which we had to pay $81,992,390, while Canadian workme looked in vain for work or found part time employment only

Gives Home Employment

A more extensive list on a similar line has been issued b the Canadian Trade Commission, enumerating various pr ducts that can be purchased in Canada, thus developing th home market, and the Commission says that "for every mi lion dollars retained in Canada by a refusal to buy other tha Canadian goods, a year's continuous employment can be give to at least one thousand people." Sir Edmund Walker says "Every dollar's worth we buy abroad means that a dollar' worth has been diverted from a Canadian workman."

Gentlemen, as citizens of Canada, we should, I urge, d all in our power to end this stupid waste of man power an of money. But this is not the only way in which we hav followed the short-sighted lead of that debt-burdened family Last year, for instance, 1,300,000 cords of pulpwood, value at $8,500,000 was exported, which, if manufactured into pape at home, would have represented more than $75,000,000, an provided an additional $25,000,000 for wages for Canadia workmen. So with other Canadian industries. Canada e ported last year unfinished products to the value of mo than $900,000,000. If the manufacturing processes of eve one-third of these had been completed in Canada, emplo ment would have been given to at least 125,000 more wor people, close to $125,000,000 would have been provided f

additional wages, and salaries, and the net value of Canadian products have been increased by approximately $275,000,000.

Are we to continue doing the rough and menial work while others get all the benefits of brain and skill? Do we resign ourselves to this fate by acknowledging any superiority in foreign brains or skill? We do not. We have shown the world during the past five years that Canadian brains and Canadian skill of workmanship are equal if not superior to the best that is produced elsewhere. Not only on the fields of Flanders has this been proved, but in the billions of dollars' worth of manufactured products that we have supplied to the Allies, with which to carry on the fight against the Hun, we have demonstrated our ability to others; they have acknowledged it, but we must realize it ourselves.

Here then is the proposition I put to you as buyers: If you agree with me that it is essential to Canada that revenues should be conserved and that the most should be made out of her productive possibilities, and if you further agree with me that it is only by supplying as many of our wants as we can ourselves, that this conservation and realization on resources can be effected, will you not also agree that in every decision by which you distribute a portion of those demands for production you should give Canadian goods first choice, qualities and prices being equal?

Principles at Stake in the Big Steel Strike

By J. T. S.

THE strike of the employees of the United States Steel Corporation, which began on September 22nd, affecting a host of subsidiary companies dependent upon this basic industry, is a matter of grave concern, not only to those connected with the companies implicated, but also to the entire nation.

According to an Associated Press despatch, dated New York, Sept. 22nd, the United States Steel Corporation, at the beginning of this year had 268,710 employeees, to whom it paid in salaries and wages $452,663,524 annually.

The average daily wage of all employees, exclusive of the general administrative and selling force, was $5.33. The Corporation controls 145 plants.

What the Men Demand

This is the programme of twelve demands prepared by presidents of 24 unions in the iron and steel industries on which the strike vote was based:

1. Right of collective bargaining.
2. Reinstatement of men discharged for union activities.
3. An eight-hour day.
4. One day's rest in seven.
5. Abolition of the 24-hour shift.
6. Increase in wage sufficient to guarantee American standard of living.
7. Standard scales of wages in all trades and classifications of workers.
8. Double rate of pay for all overtime, holiday and Sunday work.
9. Check-off system of collecting union dues and assessments.
10. Principles of seniority to apply in maintenance, reduction and increase of working forces.
11. Abolition of company unions.
12. Abolition of physical examination of applicants for employment.

Chairman Gary's Letter

The following letter from Chairman E. H. Gary, addressed to the Presidents of the subsidiary companies of the United States Steel Corporation, giving the reasons for declining to deal with labor unions, was made public by the Carnegie Steel Company on Sept. 16th:

"Not long since I respectfully declined to meet for the purpose of discussing matters pertaining to labor at our various plants a number of gentlemen representing certain labor unions. They claim this furnishes cause for complaint and have stated that they intend, if possible, to prevent a continuation of operations at our mills and factories.

"I deem it proper to repeat in a letter what heretofore has been said to you verbally. I entertain no feeling of animosity toward the gentlemen personally and would not hesitate to meet them as individuals, but I did not and do not consider it proper to confer with them under the circumstances.

"The declination was made for two reasons: First, because I did not believe the gentlemen were authorized to speak for large numbers of our employees, whose interests and wishes are of prime importance; secondly, because a conference with these men would have been treated by them as a recognition of the 'closed shop' method of employment. We do not combat labor unions as such. We do not negotiate with labor unions because it would indicate the closing of our shops against non-union labor; and large numbers of our workmen are not members of unions and do not care to be.

"The principle of the 'open shop' is vital to the greatest industrial progress and prosperity. It is of equal benefit to employer and employee. It means that every man may engage in any line of employment that he selects and under such terms as he and the employer may agree upon; that he may arrange for the kind and character of work which he believes will bring to him the largest compensation and the most satisfactory conditions depending upon his own merit and disposition.

"The 'closed shop' means that no man can obtain employment in that shop except through and on the terms and conditions imposed by the labor unions. He is compelled to join the union and to submit to the dictation of its leader before he can enter the place of business. If he joins the union he is then restricted by its leader as to place of work, hours of work (and therefore amount of compensation), and advancement in position, regardless of merit; and sometimes, by the dictum of the union leader, called out and prevented from working for days or weeks, although he has no real grievance, and he and his family are suffering for want of the necessities of life. In short, he is subjected to the arbitrary direction of the leader, and his personal independence is gone. Personal ambition to succeed and prosper is stifled.

"This country will not stand for the 'closed shop.' It cannot afford it. In the light of experience, we know it would signify decreased production, increased cost of living, and initiative, development, and enterprise dwarfed. It would be the beginning of industrial decay, and an injustice to the workmen themselves, who prosper only when industry succeeds. The 'open shop' will generally be approved by them, for this permits them to engage in any employment, whether they are or are not members of a labor union.

"It is appropriate to further emphasize what has been said many times in regard to our employees. Every one, without exception, must be treated by all others justly and according to merit. In accordance with our established custom, one of our workmen, or a number of our workmen from any department, will continue to be received by the management to consider adjustment of any question presented.

"It is the settled determination of the United States Steel Corporation and its subsidiaries that the wages and working conditions of their employees shall compare favorably with the highest standards of propriety and justice. Misrepresentations have already and will hereafter be made; unfavorable criticisms may be indulged in by outsiders, especially by those who have little knowledge of the fact; our employees may be threatened and abused in the effort to influence them to join the unions against their own desire; but, whatever the circumstances may be, we should proceed with the conduct of our business in the usual way and should give evidence to our employees that we mean to be fair with them."

Export Trade Opportunities in the Far East*

In China, Because the Country is Practically Undeveloped, there is a Better Opportunity than Anywhere Else for Doing Business—Matters that Should be Borne in Mind when Entering this Field—Should Send Best Men Available

By CAPTAIN ROBERT DOLLAR

IN the early days of this country it was hard for us to believe in opportunities in the Far East; we did not need them. The development of this great country took up all of our time and money; our manufactories were kept busy producing goods for our own needs. At that time we were a world within ourselves. Now the conditions are entirely changed. We are now producing more than we can use; therefore, we must either sell the surplus in foreign countries, or curtail our production. This latter none of us want to consider. Instead of curtailing, we all look forward to increasing our production, so there is only one way out, and that is to increase our sales in foreign countries.

Some people think, "Well, this don't interest me," but I want to say to you that there is not a man in this room that is not interested, either directly or indirectly, and I am pleased to note that many of you belong to the farmer class. All farmers are, or should be, intensely interested; every manufacturer, the merchants, bankers, railroads, and ship owners.

Sell Products to Others

The war, increased taxes, and the results of the war, have intensified the situation. The war tax must be paid, and how can it be paid? Certainly not by us trading amongst ourselves—to use a common expression, "swapping jack-knives"—but by selling our products to other countries, and receiving from them new money or by exchange of commodities, which is as good, especially if it is raw material from which we can manufacture and export the finished products, and anything we can do to make all classes of the community see and understand this vital question will be time and money well spent.

For many years after the Civil war in the United States, they, like ourselves, were busy in the development of the great Western States, which took up all of their time and attention. As a consequence, foreign trade was neglected. At that time it was not a necessity as it has become of late years. But now the whole country is aroused by the necessity of more foreign trade, and there is intense interest in all classes of the community. In every city in the States, foreign trade clubs and committees have been formed, and there are meetings almost every day to devise the ways and means of accomplishing the desired results.

Now, in Canada, there is some interest, but not as general as it should be, and it is up to every one of us who appreciate and know the value and the absolute necessity of foreign commerce, to be up and doing, and to convince our neighbors that we must have it. When the whole community are convinced of the importance of it, then you will see plenty of commerce with the outside world.

Therefore I hope I have convinced you of the necessity of foreign trade.

I have taken that part of the world as an example, although opportunities abound in many parts of the globe, especially on this continent, in the South and Central American countries, but I have spoken particularly of the Far East, as it is bounded by the same ocean that makes our western boundary, so it is just across the Pacific. I will confine my remarks more particularly to China, where there are between 400 and 500 millions of people, and, according to our ideas of development, it is practically undeveloped. Therefore, I believe there is better opportunity there than in any other part of the globe. They are the oldest country in the world, and, until a few years ago, and even at the present time in the interior of the country, the manners and customs of their country are just the same as in Palestine during the time of Christ on earth. But a tremendous change has come over a great part of their country, and now they want much that we have to sell, and we want much that they have for sale; therefore, our interests are mutual. The possible development and magnitude of this trade are not appreciated in this country. Take, for instance, the Yangtze river that is navigable for eight months every year for the largest ocean-going steamers as far as Hankow, about 800 miles from the ocean, and no river improvements of any kind have ever been made. You will understand its importance when I tell you that one-seventh of the population live in the country drained by this great river and its tributaries. The river Han enters the Yangtze at Hankow. It is about one-quarter of a mile wide, and where it falls into the Yangtze I have seen a solid jamb of boats a mile long. This gives an idea of the commerce on this small river, situated in the geographical centre of China.

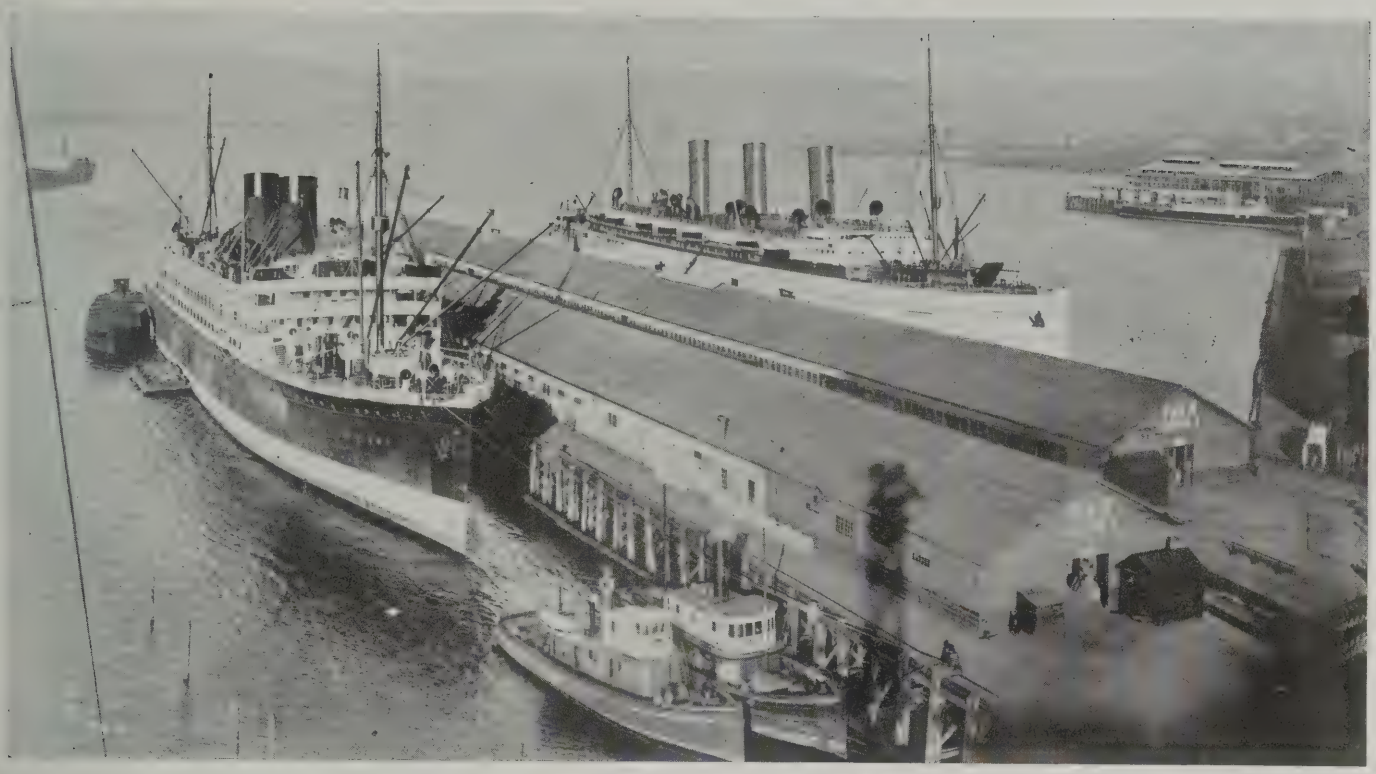
A German professor, sent by the late emperor to report on the coal fields of this part of China, reported more coal than in all the rest of the world. Of iron ore, little is known how much there is, but there is enough in sight for at least fifty years, and of a very high grade, and practically no development work has been done.

Province of Szchuen

More than 1,000 miles from the ocean is the great province of Szchuen, with over sixty millions of people, which is practically cut off from communication with the outside world on account of what is called The Gorges. This is a rapid which makes navigation impracticable. The rise from low to high water is 150 feet, although five small powerful steamers have succeeded in going up through those rapids and junks are pulled through them by over one hundred men, but the great loss of boats has made insurance next to impossible; therefore, the rate of freight is so high that only the most valuable products can be transported. But this great community, a country by itself, produces in the most primitive way every necessity of life. Several surveys for a railroad line have been attempted, showing that a practical line could be built. On the last of those surveys, bandits captured two of the Americans and claimed and received a large bounty for delivering them back alive. These Americans were in the employ of the American International Corporation, of which I happen to be a director.

When a railroad is built it will open up a very rich field for foreign commerce that at present does not exist. To give you an idea of the diversity of the present trade I took the commodities carried on two of our steamers, which sailed

* Address delivered before Alberta Industrial Congress at Calgary, August 14, 1919.



Scene on the waterfront of Vancouver showing liners loading freight for the Orient

from Vancouver to the Far East, and found they carried from this country 242 different commodities and brought in 120. I have the list here, but it is too long to read to you. Therefore, I am quite safe in saying that there is not a person here who is not interested in some of these articles. Unfortunately for Canada, 90 per cent. of all those goods originated in the United States, and it will surprise you to know that a great deal of them find their way from and especially to Canada through the United States.

The field of opportunity is so large that Canadian merchants in going into it need not displace any other nationalities already engaged in this traffic. But they will develop new industries which do not exist at present. For instance, the time is near at hand when highways will be built in China, at which time there will be an unlimited demand for auto trucks and automobiles. You will be surprised to know that outside of a few cities there are no roads on which an automobile can run. The so-called roads are only fit for wheelbarrows, and in North China, one-horse carts.

The rivers and small creeks are used for transportation. There are only a little over 6,000 miles of railroads in China.

Development of Commerce

Now, to develop commerce, I hear a great many people say, "Let the government do it." The government can assist and are helping, but it is up to the people to do it, and if those meetings do no more than arouse Canadians to the necessity of going out for foreign trade, great good has been accomplished. The farmer can lead his horse to the water, but he cannot make him drink. The government send men to foreign countries and inform you of the opportunities, but unless the merchants go out after and develop the business no results are obtained. Your very best men must be sent to work up trade; none else will do it.

Then you must have branch banks; some are about to be established. You must also have ships. A small start has been made also to get them; they are great drummers of trade.

True commerce is an exchange of commodities, and as ships must have cargoes both ways, the shipowners, if they are to succeed, must develop business so that he can not only carry your products to the people of the world, but must bring back what other countries have to sell, thereby having cargoes both ways; otherwise your products would pay double freight if the ships came home without cargo.

Building Plant in Hamilton

Canadian Carbonate Co., Limited, are Adding Another Factory to Their System

Following their policy of placing plants wherever their growing business demands it, the Canadian Carbonate Co., Limited, who already operate plants in Halifax, Montreal, Toronto and Winnipeg, with warehouses at Quebec and Vancouver, are about to erect a factory in Hamilton. A site has been secured at the foot of Simcoe Street on Hamilton Bay and building operations will commence at once. A careful study has been made of plants in the United States and plans adopted call for building and equipment that will make the factory the most up-to-date on the continent. The building, which should be ready for occupancy by March 1, will be 100 x 50 feet and two storeys in height.

It is interesting to learn that the Canadian Carbonate Co. are now shipping all the carbonic acid gas used in the British West Indies, having captured this important market from the Germans. The gas is shipped from the Halifax factory and, by reason of adequate shipping facilities and attractive prices, a strong hold has been obtained on the market. The increasing use of refrigeration systems and the growing consumption of ginger ale and beer, are factors in the expansion of the business.

New Light on Subject of Technical Education*

Textile Manufacturers of Canada are Furnished with a Scheme of Education Based on the Experience and Investigations of one of the Foremost Authorities on the Textile Industry in Great Britain

By PROFESSOR A. BARKER

Dean of the Faculty of Technology, Leeds University, England

SOON after my arrival in this country I had the privilege of addressing a small audience at Montreal, and in that address I endeavored to deal with mathematics, physics, chemistry and art in their relation to the textile industry. At Hamilton, where I had the privilege of addressing certain leaders in the textile industry, I there referred to such matters as Mendelism and Bio-Chemistry and wool-growing problems.

At Hamilton I tried to show what the attitude of the employer and mill-manager should be towards the prospective employer and mill manager, and also towards the workers with whom every mill manager has to deal. That section of our work this afternoon will come very much to the fore, because it is impossible nowadays, and certainly impossible in Canada, to say that the mill worker does not concern you. You will have to take a lively interest in the employes as well as in thinking about training employers.

This afternoon I want to deal with the more fundamental questions that we have to face and see if we can get something more definite. Purposely I was very indefinite in my previous addresses. This afternoon, because I am hoping to see the industry in the United States, and also a little more of what the evolution of the textile industry is and is likely to be in the Old Country, I don't wish to be much more definite.

Canada is Committed to Textiles

The first question I want to ask is the first one that was put to me on arriving in Canada. One of my old students whom I was delighted to meet at Montreal put this straight away as soon as I landed: "Why should not Canada confine her attentions to farming and mining and leave manufacturing alone?" After having been round the industries here I have got to say that Canada is committed to textile industries. Your organizations are so developed that you have firms interested in the housing question. One can't question the fact. It is absolutely beyond question, and if it were not beyond question on that score, I should be almost disposed to think it would be on another score. One day this week I had the honor and pleasure of being taken out by the Duke of Devonshire, the Chancellor of our University, to the experimental farm at Ottawa, where I found that probably a good deal of the farming in Canada will have to be developed on the four year rotation, and in that rotation nothing will play a more important part than sheep farming. Very likely in the near future you will find that wool production here will be greater and you will have more raw material.

While in Ottawa, too, I went into the market place and saw the farmers coming in with their produce, *and the thought struck me that if there was no one to consume this produce, what would be the use of farming? It is actually to the advantage of the farmer, and will be more and more, that you should develop the textile industry on right lines and link it up on the lines I suggest, with the farming industry.*

The next point I suggest in this: Some of you might say, "'Well, while you have a large experience in the Old Country, can you put a scheme down before us which will fit our conditions?" Again I want to say authoritatively that there is no scheme working at present which will fit Canadian conditions. In other words you have to evolve your own scheme. The next thing that strikes me (and this is almost one of the most important things that I have to say to you this afternoon) is that Canada, both educationally and industrially, is in the sequence of world evolution. You are not cut off from Europe, still less from the United States, and in industry and education, in every line of thought and action, you to-day are not facing different problems, but you are facing the same problems from the same standpoint and the same difficulties that we are facing in the Old Country.

And we want your experience just as much as you want ours. Therefore Canada must play her part in defining actual lines of evolution. A more difficult thing for you to do, but a finer part for you to play, is that alongside other countries you should take your part in working out the salvation of the world as a whole. So, this afternoon, I want if possible, to attempt to help you towards a broader and at the same time, a more definite outlook on your industries through my own experience.

I have got a book here practically filled with notes on my visit to the various firms in Quebec and Ontario. Although I have missed many important concerns, I think I have visited concerns representative of the whole industry, and with my experience in the Old Country, with the experience I have had here, I want to put before you the conclusions I have come to, not in any dominating sense, but in the hope that you will be able to take some of them to yourselves and mould them to your own requirements. If I can add experience in the United States and finally draft my report which I hope to write on my return to England, I will be more definite. The problem is a difficult one because I have to deal with both the educational and industrial sides, to ask what should be the basis of action educationally, and what should be the basis of action, industrially.

Growth of Student's Mind the Basis.

I want to face these questions quite candidly because that might save a deal of trouble later. Technology is, between the devil and the deep sea. Your educationist says that technology is not education. The technologist says that the educationist is not practical. I have satisfied myself that the basis of consideration is the growth of the student's mind. You will get a better result by working on the student than by going to the industry and thinking that you are going to impose it upon him. I know a great deal has been talked about games in the English public school system. I am going to take a very bold stand. Some may say it is theoretical. I have tested it for twenty-one years and it is the line to take, not merely for the operative but for the capable manager in the mill and the capable organizer of industry.

The most useful definition of education, I think, is 'That training which best fits a man or woman to take a

*An address delivered on September 6, before a joint meeting of the Canadian Woollen Manufacturers' Association and the Canadian Textile Institute, held in Toronto.

progressive interest in life—to develop to the full his potentialities.' I think as an educationist, I should say that we must see to it that all courses of instruction that are given, such courses as I am going to suggest, must be scientific in the sense of being reasonably fundamental. We have got over the idea of the scientist who thought that everything might be brought down to certain fundamentals. We know now that we must find our own fundamentals. Courses of instruction must be reasonably fundamental, sequential and capable of stimulating imaginative insight. One word in reference to sequential work. No self-acting mule had been made for the reason that there was not a man in the industry who thought he could combine six or seven movements into one. So we had to go to a mathematician, Richard Roberts, who by his various powers of sequential reasoning, put them together and that is why we have a self-acting mule.

Mr. Saunderson, a famous English schoolmaster, believes that you must educate your boys in the subjects in which they are interested and in which their parents also are interested. If you are going to stimulate the imaginative insight of your student you have to take something that he is interested in. The educationists need not be afraid that textile industries, properly developed, will suppress either of these three things, fundamentals, sequence and imagination.

Must Have Efficient School Equipment

Look at the matter from the manufacturers' point of view. He must see to it that the conditions of satisfactory practice are attained. I would suggest that the manufacturers would attain to that by just attending to two points. First of all you can't teach satisfactorily by talking; you must have an efficient school equipment. I am changing the Leeds system from the lecture, from turning the department itself into a book, to the processes demonstrating the practical from the raw material to the finished fabric. The other way you can ensure satisfactory conditions of practice is to offer prospective students opportunities of practical experience in your mills. To my mind the ideal course is for there to be no break in the continuity of the university student's work. Give the student the practical work during the long vacation. In that way you will produce the ultimate efficient and progressive mill manager. First find capable students, second give them an efficient training, and third, give them opportunity. You can't do without any one of these three things. You will find you have not too many students with the necessary ability.

Then you may say European conditions are different from Canadian conditions. What are the requirements for the Canadian industry if satisfactory progress is to be made? Just one little difference we get here is very illuminating. You require a manager but you also require a pioneer, men trained for pioneer work. Was it Napoleon who said: 'Each private ought to have a Marshal's baton in his knapsack.' One would like to feel that each student should have a managership in his knapsack and that there should be some course mapped out for him to play the leading part in the industry.

Operatives Should be Happy

Hardly second to that you should have intelligent, interested and conscientious operatives and these operatives should be leading a happy life. You can't shut your eyes to the fact. I have sometimes wondered that men from the English slums had the spirit to fight for satisfactory conditions between nations. We realize what these men did and we are going to make conditions which will make them disposed to fight in the future if the call comes.

You must have well-equipped laboratories. In these days one cannot do without research. These laboratories and sheds must in some way be connected with other research equipments and that of course leads one to the idea that some association should develop between textile schools and the university. Also you require a bureau of standardization and a conditioning house, making possible scientific accuracy throughout the industry. Some people say we should not attempt to make it scientific, the industry being so diffuse. It is so diffuse that it is all the more necessary to develop it on scientific lines. Certainly you will find that a conditioning house established here would promote more scientific accuracy and ultimately your industry would be developed.

Erect Small Plants for Research Work

What equipment would be required to carry out all these points that I have suggested? I would suggest, in the first place, that you should start with your research plans, small plants where researches might be conducted with a view to pioneer work. You might certainly start with a small wool plant, combing and French drawing, and possibly silk. Supposing you were to develop a small combing plant and your manufacturers knew you could have batches of wool put through that plant to see if you could get what you required. If it proved satisfactory it would lead to your developing a plant on these lines and thus becoming pioneers in this industry. The hosiery industry requires large quantities of worsted yarn already produced here and practically as good as we spin it in England. It seems to me that McGill might very well take on cotton and, in view of the artistic merits of the French-Canadians, possibly the development of a designing school.

The first thing I suggest is small practical plants designed for experimental purposes and pioneer work, laboratories (physic and chemical) with the necessary classrooms. It need not be extensive. In some cases it might be advisable to refer to certain things to other departments of the university.

Then your standardization department. We have national laboratories doing excellent work. You will find a department here of that sort of great advantage. When wool is ten shillings a pound, and you know that wool as bought will vary from ten to forty per cent. in moisture, it seems to me that you would find a conditioning house and bureau of standardization would pay for itself in two ways. It would enable you to deal with expensive raw wool and silk, and it would also tend to get you on a really satisfactory, trite and definite basis.

Problems Being Worked Out

Some of the textile problems become enormous. In many cases from the individual point of view they are working out well. The result of development on the lines I have suggested would be that you would get some sort of income to the central institution and indirectly you would save a great deal of money. As to the scheme of working such an establishment, first of all you would have to take into account the prospective manager. The ideal training of course would be to go through such a school as I had the privilege of visiting this morning, working up to the university, and it seems to me that the university ought not to be entered before he reached the age of eighteen or nineteen, because what we want in the student later is the highest development of mathematics, physics and chemistry. So that if the student could be prepared in the industrial atmosphere such as you have in that school, still gaining that insight in the educational faculties to which I have referred, he could then be drafted into a three years science degree. I would not miss out the man trained otherwise. If a student can satisfactorily go through a three years course at the science school

then a post-graduate course in the textile industries would produce the man, not perhaps at once ready to become a pioneer but well on the way. In a very short time the industry would develop and I feel sure that very quickly it would be doing good work.

The Training of Textile Teachers

Get hold of the most intelligent men you can with the proper atmosphere, who knows what mathematical work is, who knows the atmosphere of a chemical lab. I would suggest that when the boy enters the university, he should say if he desires to go forward to textiles and, if he does, he should be given the opportunity and advantages of working in the mill during the long vacation.

I think you should also have the idea of training teachers on the lines of our university tutorial classes in the Old Country. We have between twenty or thirty tutorial classes in Yorkshire. In Sheffield and Manchester the same practice is in vogue. It seems to me the university ought to take in hand the training of these teachers to go out as pioneers and develop these classes.

Another point would be the institution of university internal classes in either cities, towns or villages or in the mills. If ten or twelve people want class in a certain subject we would be prepared to send a teacher to help them along. These classes should be of two types, vocational and technology taught as humanities with the idea of stimulating their interest and creating better workers, having more interest in life and having a larger outlook on life.

Then you have to deal with the matter of fundamental and technical research and you have to train your researchers. There is only one way to train them. Let the student researcher work alongside a trained researcher. We won't debate the matter as to whether research is connected with education; they go hand in hand and there are great advantages in running them side by side. Sooner or later you will find your factories able to take advantage of these researches. There is not the slightest use in finding out things if the industry is not ready to profit by what is found out. It is as important to train the men to go into the mills and apply the researches as it is to investigate and make researches.

Good Standardization Needed

I need not deal further with standardization. I think the manufacturers particularly will feel that standardization may have an influence in the evolution of the industry, and if you have a conditioning house, enabling you to have your goods standardized, you will have more confidence in your industry and finally evolve it upon the very best possible lines.

It is twenty years since I organized the first good exhibit of testing machinery in Bradford. One man said, 'Clear all that off; if people don't like to buy my cloth they can do without it.' The Bradford manufacturer to-day knows that the conditioning house has helped him to gain greater accuracy and better conditions. That is one of the things you could profit from our experience—greater confidence and greater protection in your work.

You gather then that the costs you would have to face would be the cost of building. Even your building should be put up to represent what the ideal should be. I feel in my department at Leeds though we never gave a lecture, that the effect of the buildings and the ideal conditions would have paid for itself. The truth is that in certain textile industries we have to fight against workhouse conditions. The woollen industry started in the workhouse. The cotton industry is entirely a machine-created industry. In some factories investigations are made to see to what pitch one machine can be tuned and all the other machines are tuned to the same pitch. Find out the best educational system and tune yours up to that. Fix the ideal first of all and make that the lowest that you are going to attain.

With reference to your equipment you will invariably find that machine makers would help you. Other expenses such as power, agents and materials, etc., might run to a considerable amount unless you adopt the line I suggest of carrying through experiments for outside firms. I warn you against trying to make income from running your plant because that might go against your research work. When I tell you that our expenditure at Leeds runs into thousands you will realize that it is a pretty big scheme. I would suggest, however, if you do anything at all, or no matter if your start be small, to develop it as part of a greater scheme. Don't make the mistake of starting with a too limited outlook. My department at Leeds is very picturesque but not well organized simply because it has been put together piecemeal. Have a large idea in mind.

Then the question is asked, "Is Canada justified in thinking of such a comprehensive scheme?" The real foundations of life have been changed. It is difficult to put it into words. Do not hope to get back to the conditions of 1914.

Conditions Different From 1914

The conditions we shall have to get back to will be very different from those of 1914 and when you realize the change in the outlook, the changes that are inevitable, you will realize that the prospective mill manager is going to have a great responsibility on his shoulders and the least you can do for him is to give him that training and education that will fit him to meet that responsibility and bear the burden. Then the foundations of education have been changed. I believe the strongest development has taken place recently. Mr. Saunderson, to whom I have already referred, has eliminated competition in his school. He has the idea that the competition of a boy should be with himself and not with his fellow student. I too believe there is something better than the present system. The word co-operation does not quite express it although it has something to do with it. It might be illustrated by the comradeship in the trenches. Canada and the Mother Country and other countries as well, will have to join together in working out these difficulties which we only partially see before us but which we feel coming on us.

It seems to me that you here on this continent have a great future before you if you face it in the right way. You must not face it in too commercial a spirit. I have tried to fix high ideals, not because they are the only thing, but because it is natural that we should overlook them. Bradford College brought into Bradford a business worth £300,000 a year. Bradford College brought into Bradford a man who gave an order for 1000 looms to one firm. Don't imagine that what I say regarding the growth of the student does not mean the other thing too. It means the other thing in a better way.

French Treaty

As regards the French Treaty, a telegram has been received, dated September 11th, 1919, from the authorities at Ottawa, in which it is stated that there is an understanding between the British Colonial Office, the Foreign Office and the French Government that the commercial treaty between France and Canada is to remain in existence, subject, however, to termination on three months' notice being given by either party.

Some of the Reasons for a Customs Tariff*

One of the Principal Advantages of Having a Tariff is that it Makes it Possible to Negotiate Conventional Tariffs with Other Countries—Failing this Foreign Markets Might Remain Closed Against Canadian Products

By J. K. R. BRISTOL
Manager, Tariff Department, C.M.A.

YOU have asked me to state some reasons to you for a Customs Tariff. There is the well known reason that he people in this country should be protected from the same iving conditions which prevail amongst the people in some f the world's great trading nations; but this reason for a ariff is so generally recognized and accepted that I shall not well upon it.

Those who will grant it was wise statemanship to invite he provinces into this Dominion; to federate the Australian tates, and to draw the several States to the south of us into ne nation, will also grant that it is wise statemanship to ring closer in bonds of national sentiment and national trade he respective countries which constitute the British Empire. No other practical plan has yet been evolved by which that an be accomplished so readily and efficiently as by each ritish country, in respect to its dutiable imports, fixing lower r preferential rates of duty to specially encourage the importation of products of other British countries. That important force for the development and strengthening of national ties is thoroughly employed between the United States and er overseas Dominions—the Philippines, Hawaii, Alaska, Porto Rico, the recently acquired Danish West Indies, and even in the case of Cuba. By this means last year over 70% of the total outside trade of the Philippines, imports and exports, was with United States countries. A similar policy toward their respective Dominions is followed by France and Italy, and was followed by Germany. There must be a tariff in order that this Dominion, by granting tariff preferences for British goods, may participate in the policy of strengthening national bonds between British countries through the development and consolidation of inter-Empire trade. This is one reason for a Canadian customs tariff that will appeal strongly to Canadians.

Mutual Tariff Concessions

Without a Canadian customs tariff it would not be possible for this country to negotiate conventional tariffs; that is, to negotiate with another country for mutual tariff concessions for the furtherance of desirable trade between each. Before the war the technical arrangement of the tariffs of most of the important European countries for the purpose of restricting conventional tariff concessions to the particular country with which a treaty was negotiated, became a fine art. I have a striking illustration of how such matters were worked out by Germany, which I will read, because it indicates the extent to which tariff specialization has been developed, viz.:

"Complaints have often been aimed at what is styled 'specialization' in the customs tariff. Specialization means making the wording of a tariff item so particular in matters of description that the item, while general in phraseology, confers a benefit on only one foreign country. Thus, Germany may be bound by commercial treaties to give other countries the same concessions which it makes to any one particular country, and it may want to make a concession to one country without extending it to all others. This is done by inserting a tariff item so worded that, in effect, it applies to only one country. Take the following example of specialization:

"Tariff item 103 of the tariff of the German Customs Union provides a duty of 8 marks per 100 kilos, live weight, for cattle. Then there is a sub-item that reads: "Large, dappled mountain cattle or brown cattle, reared at a spot at least 300 meters above sea level, and which have had at least one month's grazing each year at a spot at least 800 meters above sea level, may, according to certain other specifications, be imported at rates as low as 9 marks per head. A note, explaining further, under item 103 is as follows:

"Large, dappled mountain cattle is to be understood as meaning the dappled breeds belonging to the short headed variety. Brown cattle are those breeds which belonging to the long headed variety, especially to the races of Alpine cattle—have a silver gray to dark or very dark brown hide, with lead-colored muzzle bordered with very light brown, almost white; black hoofs and horn tips; and dark tail tuft. Every country that has a 'most-favored-nation' agreement with Germany is entitled to the benefit of that item in the tariff. Belgium, the Netherlands, England and other countries might, before the war, enter into Germany all the cattle they wished under that tariff item, to the extent that they had cattle for shipment which they could certify and convince the German customs authorities were up to the specifications. Within its own limits it was a general grant; no mention is made of preferring one country over another—in that item. Naturally the German authorities could do nothing more than shrug their shoulders when it was suggested by some foreign experts that the item referred to applied, and was intended to apply, exclusively to a neighboring mountain Republic."

Negotiate Fresh Conventions

Now, we have conventional tariffs with a number of countries for the purpose of developing foreign trade to the national advantage of this country. These conventional tariffs have been denounced by France and Italy for the purpose of freeing their hands to negotiate fresh conventions and they must be revised in the near future. The lines on which the French Government plans to negotiate new conventional tariffs are explained in the Trade & Commerce Report of September 8th as follows:

"The French Government have recently denounced their commercial conventions with foreign governments, which were based upon the most favored nation principle; and in the forthcoming negotiations for the conclusion of new arrangements, the new laws, it is stated, will give the French Government power to establish French commercial relations with each foreign country on a strict basis of reciprocity—that is, only to grant to each country certain tariff concessions in return for concessions which are considered to be of an equivalent value to French commerce."

Without a customs tariff in Canada foreign countries would have no inducement to concede lower conventional tariff rates in favor of Canadian products, whereby their purchases of our products, instead of the like products from some other country, would be promoted. Foreign markets which otherwise would remain closed against Canadian products may be opened up by means of conventional tariffs. This is another reason for a Canadian customs tariff that will appeal strongly to the business sense of Canadians.

In Europe, about 1,860, by treaty with France and other principal European countries, Great Britain seemed to have inaugurated an era of free trade that would long continue; but, within twenty years, these great trading nations, except

*An address delivered before the Purchasing Agents' Association of Toronto, on September 17th, 1919.

Great Britain, were under the full sway of protective customs tariffs and have been ever since. The financial success and increased commercial strength of all these nations that adopted protective tariffs has been phenomenal.

During the past year we have seen the United Kingdom, for the avowed purpose of protecting her industries, enforce strict prohibition against imports. Also, she has inaugurated protective customs duties of 33⅓% on behalf of certain of her industries with the prospect of extending protective legislation to various other groups. Even the matter of sterling exchange imposes a barrier equal to about 15% against manufactures from those countries whose products would naturally find their way into Great Britain. In these matters Great Britain is bound to consider her own particular Empire interests. Some may believe that it is not in the particular interests of Great Britain to protect her industries to-day. A striking illustration of Britain's need for stimulating domestic production appears in a sentence uttered at Vancouver on the 27th ultimo, by Mr. Robert Dollar of the Dollar Steamship Line. Here it is:—

"Great Britain, one of the greatest producing countries in the world prior to the war, is without an outbound cargo to-day. Two of our boats left there last week in ballast, and although there are cargoes offering from America to Europe, nothing is coming our way."

In these affairs Great Britain is not like a new country such as Canada is. In Great Britain the factories and organizations already exist. Their problem is to diminish costs, secure supplies of material, and to stimulate production. In a new country like Canada, struggling for industrial development, factories and organizations have to be created where before nothing existed. To those who wish to see this country develop and prosper within the British Empire, this is another strong reason for a Canadian customs tariff.

Protective and Scientific

The customs tariffs of France, Italy, Switzerland, Germany, Austria, Russia and the Balkan States are strongly protective and highly scientific—and intricate. The schedules of the tariffs of these countries contain lengthy and minute provisions for duties on manufactured commodities and upon extensive lists of so-called raw materials. One item in the yarn schedule of the French tariff, selected at random, contains 69 lines of reading matter and 36 different rates of duty, and many of these items in the French tariff and in the tariffs of these other countries, are much longer and more intricate. On wheat the French tariff is within a fraction of 37c. per bushel. Germany's minimum tariff on wheat is 34½c. and her maximum tariff 47⅛c. per bushel. The tariff of each of these countries primarily is compiled with the object of caring for the commercial interests of the particular country which frames it. And the height of its tariff fence on behalf of each industrial group is its measure of need for fiscal guards against that nation's exploitation by its commercial rivals.

The South American countries each operate under intricate tariff provisions which apply customs duties on imports, for the purpose of producing revenue and to provide protection to their industries. The Chilean Tariff Commission in 1916, when presenting the first draft of a tariff law then being introduced, stated that it had rounded out the protective system introduced by the tariff of 1897.

"No one," the Commission declared, "has advised any deviation from this policy, which has been followed, and is followed, by the majority of the countries of the civilized world, and especially by our neighbors with whom we have close commercial relations." The customs duties of these countries reduced to averages over all imports, free and dutiable, for the latest year I have been able to obtain statistics, compare as follows: Argentine, 20.8%; Bolivia, 17.1%; Brazil, 35.9%; Chili, 19.9%; Equador, 36.6%; Paraguay, 31.1%; Peru, 21.9%; Uruguay, 36.2%; Venezuela, 46.7%.

Newfoundland, Australia, New Zealand, Japan and the United States operate under efficient protective tariffs. South Africa has announced her intention of adopting a protective tariff. The United States Congress now is dealing with legislation sanctioned by the President, designed to grant further protection to various of her industries. A general upward revision of the tariff of Australia, according to an announcement of Acting Premier Watt, is to be made during the present session of the Australian Parliament. Many of these countries, like the United States, by levying fees for consular invoices or bills of lading at the point of origin of shipments from abroad into their country, further protect their own domestic markets.

Other Nations Fenced In

In these matters each of these countries is caring for its own particular interests. We cannot in reason find fault with them for that; nevertheless it is an impressive, incontrovertible truth of the very highest importance to Canadian growth in industrial development, that to-day, throughout the world, every great trading nation fences its borders by protective tariffs against the exploitation of its markets by its commercial rivals. Under these conditions, without a tariff, in normal times, the markets of this country would be filled with the overflow from protected foreign factories. And the markets of Canadian factories would be so reduced as to raise their productive costs above a competitive basis. Canadians are a sensible people, accustomed to squarely facing and weighing facts. In face of these conditions, for Canada to tear down her tariff walls would be like one prosperous farmer in our nearby townships who suddenly would tear down his fences, admitting wayside cattle to his farm. It would be like turning on to a flat country the overflow from all the power dams of the world. So long as the great trading nations of the world carefully fence themselves about to secure their own particular commercial needs, the reason for a Canadian customs tariff as a necessary guard against the commercial exploitation of this country will be obvious to Canadians.

Suppose, now, that the customs tariff of Canada be removed. Will it be necessary for most of our manufacturing population to take to farming, lumbering and the mines? It is by no means certain that India, the Argentine and Russia will not be able to furnish the world with agricultural products cheaper than we; that Norway, Sweden and Russia will not be able to furnish the world with forest products cheaper than we. Is it not evident that capital and labor would be compelled to seek more congenial conditions in other countries which do care for their own particular interests?

Countries are Backward

Let us consider the commercial tide of this country turned back to agricultural, minor lumbering operations, and mining, by taking away the customs tariff and the inter-Empire preferences that are being built up under it. One has only to glance at the history of nations to realize that countries which depend for prosperous conditions upon the unmanufactured resources produced from agriculture, the forest and the mines, never reach a high state. As a witness to this truth take the statement in 1885 of M. de Witte, once Prime Minister of Russia, and, though M. de Witte in referring to his country described it as an "agricultural country," Russia is the equal, if not the superior of Canada in mineral and forest resources, and he had these also in mind when he uttered the following words:

"In exclusively agricultural countries, neither intensive agriculture nor an accumulation of capital is possible. A large spirit of enterprise is never found there. Technical

knowledge is rare, and, as our own experience shows, even the food of the people depends upon circumstances now of one kind, now of another, against which agriculture cannot contend. . . . The best protection that can be afforded to agriculture consists in assuring for it a market at home for its products, and remunerative wages for labor which finds no occupation on the land. Unhappily, the amount of available Russian capital is insufficient; agriculture supplies almost none at all, and hoarded capital can hardly be attracted toward industrial enterprise. Beyond all question it is better to see foreign capital flowing into Russia than to witness the importation of foreign products." (From "All the Russias," by Henry Norman, M.P.).

The Position of Ireland

Outstanding proof of the accuracy of this statement of M. de Witte is before anyone who will open his eyes to consider world conditions to-day. There are other agricultural countries which one may study. One such agricultural country has the finest climate in the world; it is noted for the excellence of its soil; it lies alongside the best market in the world; it is inhabited by a virile race, people who step to the front like the Scot in countries all over the world. Ireland is that country, yet notwithstanding all its natural advantages it is noted all over the world for its poverty, except an extremely limited section in the north where factories flourish.

Still supposing the customs tariff of Canada removed, we must remember that an essential requirement of this Dominion is revenue—very large revenue. The following statement made by the Canadian Finance Minister in his budget speech this year indicates how gravely a lowering of the tariff affects the revenue:

"The total estimated loss in revenue from the tariff reductions which we have proposed aggregates seventeen million dollars. Owing to the estimated reduction in the total volume of imports into Canada due to diminished purchasing power during the current year, we may expect that, including the loss due to the reductions now proposed, we shall sustain a total loss in customs revenue for the present fiscal year of at least twenty-five million dollars. To partially offset this loss and close the gap of the deficit of fifteen million dollars between revenue and current expenditure which it would cause, we propose a heavy increase in income taxation."

American Competition

In studying this subject of tariffs, the overshadowing commercial weight of our cousins to the south of us cannot be overlooked. That country of one hundred and ten millions, looking after its own particular interests, buys from this country of eight millions of people goods aggregating only one-half the value of the goods which it sells us. In this connection I ask you to remember the fact that this Dominion at present represents a comparatively narrow ribbon of populated country stretching from the Pacific to the Atlantic Coast for three thousand miles along the northern border of the United States. In the United States, near this border, throughout its entire length, there are powerful industrial groups, with an immense domestic market, built up and nourished by high protection. These industries everywhere can strike the Canadian ribbon by means of a short northerly freight haul. But the domestic market for Canadian producers entails the longer and more expensive east or west freight haul. Moreover, Canadian production is enhanced in cost by customs revenue duties on machinery, plant, materials and fuel for manufacturing of a class and kind not obtainable in Canada. Shall this country remove those duties and level its tariff walls, whilst other countries sedulously maintain theirs out of a feeling of care for their own particular interests? Is it thus that the hundreds of millions of dollars that this country has invested in transcontinental railways, and terminal elevators, are to be brought to naught? Is it for such foreign exploitation of our markets that the five hundred United States branch factories, established in Canada, which employ 80,000 people here, are to be rendered valueless?

Valued as U.S. Goods

There is an important aid to our national development, that is little thought of, that would be swept away by a removal of our tariff. It is a provision in the Customs Act which provides in effect that goods imported into the United States and re-shipped thence to Canada shall be valued and rated for duty as United States goods. This provision prevents United States jobbers from importing goods into their warehouses from Europe, Africa, Asia and South America, and afterwards entering the same at our customs houses at the value at place of shipment in the country of origin. Without this provision United States wholesalers and jobbers could ship such goods into Canada from their warehouses, ex bond, by paying duty on the same value and at the same rate as would apply in respect to like goods imported by Canadian wholesalers direct from the country of origin. Thus, without this provision, United States wholesalers and jobbers would practically control the wholesale business of this country. You can realize in one flash of thought how that would draw business away from Canadian to United States ports; freight from our railways to United States railways; banking from Canadian to United States banks. Lest it be charged that I am magnifying the perils to this country, without tariff protection, let me read to you the views of two most eminent United States citizens in regard to a Canadian tariff proposal which fell considerably short of free trade. These gentlemen wrote their views during the progress of the reciprocity negotiations of 1911, and they were published by ex-President Taft in Boston on the 25th day of April, 1912:

Ex-President Taft to the late ex-President Roosevelt: "The amount of Canadian products we would take would produce a current of business between Western Canada and the United States. It would transfer all their important business to Chicago and New York, with the bank credits and everything else, and it would increase greatly the demand of Canada for our manufactures. I see this is an argument made against reciprocity in Canada, and I think it is a good one."

From the late ex-President Roosevelt's reply to ex-President Taft: "It seems to me that what you propose to do with Canada is admirable from every standpoint. I firmly believe in free trade with Canada for both economic and political reasons."

Investment at Stake

The factories of this Dominion represent an invested capital (1917) of more than two and three-quarter billions, having an annual output worth more than three billions, and furnish employment to about 700,000 people. A conservative estimate would give two million people obtaining a livelihood from our factories.

There are various groups of commodities, necessary to our national life, which without our present industrial development, at various stages of the war, could not have been obtained elsewhere.

Shall we forget what this industrial development achieved during the war in serving the national life in this Dominion, and in turning out absolutely essential manufactures for the Mother Country?

If we have honor and pride in this young country; if we have confidence in the wonderful possibilities of her future, if we believe in the development of a real Canadian spirit and genius, these are the strongest reasons for approving a Canadian customs tariff that will maintain and develop a national life.

The B.A. in Business—Is He a Genuine Success?

University Grads. Rally to the Support of Higher Education and Claim a Very Real Advantage for the Man with a Varsity Training—Some Notable Examples of Success that Lend Weight to the Argument

By GRANT BROWN

"I DON'T want any cigarette-smoking, college dude around my plant, telling me how I ought to run my business." That was what the average employer of fifteen years ago was apt to say if you suggested to him that there might be an opening for a university graduate in his factory. But the last decade has brought about a remarkable change. College men have been steadily winning both recognition for themselves and respect for their training. Nor has their success in business been confined to any one field. We find one university graduate at the head of the greatest railway system in the world; a second directs a great publishing corporation; a third manages a trust company; others are leaders in the packing industry, and so on.

Prominence in Industry

For the present, however, I am most interested in those graduates who have entered the manufacturing field, though even here it is necessary to make limitations. Not a few university men have attained prominence in Canadian industry by making law a stepping-stone to business success. These are so numerous and so important that they would almost require a separate article. The present sketch is more particularly concerned, therefore, with the man who takes an arts course and afterwards enters the industrial field in Canada.

Twenty years ago the church, the law, medicine, and teaching absorbed the bulk of graduating classes; in recent years the proportion who enter industrial corporations has steadily increased, and the last decade or so can point to some notable successes of university men in Canadian industry.

T. A. Russell was one of the pioneers of the movement, and that fact in itself goes to show how recent the drift into business is, for it was only twenty years ago that "Tommy Russell" was prone to lead the chorus which proclaimed:

> "Here we are,
> Right in line,
> Yell like h—ll,
> For Ninety-Nine."

First a scholarship man, later a fellow in political science, then a most successful secretary of the Canadian Manufacturers Association, next manager of an apparently moribund bicycle company—which, under his treatment, became a very lively corpse—then one of those able and daring manufacturers who gave Canada such an enviable record for the production of munitions in the Empire's sore need, now general manager of the Willys-Overland Company of Canada and President of the C.N.E.—not to mention other activities. T. A. Russell has made for himself a name to compare with both in industrial and university circles.

T. F. M. Stewart is another graduate of the University of Toronto who has won outstanding success in Canadian industry. As an undergraduate he foreshadowed later activities by showing marked ability in the University politics of the day. In business he found his opportunity as secretary of the C.M.A.; next he became Reform organizer for Toronto; after a short period of political work, he became manager of the Point Anne Quarries, Limited. In recent years he has acquired many additional interests, varying all the way from the manufacture of munitions and the building of ships to directorships in a trust company and two departmental stores.

There are two of several careers which might be chosen to illustrate the versatility of university men in business and the success many of them have obtained or are obtaining (for one must remember that the movement from the universities to the ranks of industry is still comparatively new). Some other names may serve to show the extent of the movement. Mr. George Henderson, general manager of Brandram-Henderson, Limited, is a graduate of Dalhousie University. Dr. W. W. White, of St. John, and Mr. E. Percival Burchill, of Nelson, N.B., are both graduates of the University of New Brunswick, who have attained prominence in Canadian industry. Sir H. B. Ames is a college graduate who has gained distinction both in industry and in politics. Among graduates of the University of Toronto who have won success in manufacturing, besides those already mentioned, one might refer to Mr. A. L. McCredie, of the Canadian Flax Mills, Limited, Mr. Jas. I. McLean of the Harris Abattoir Co., and Mr. H. D. Scully of the Russell Motor Car Co., not to mention the many prominent graduates who have entered the business world through the avenue of law. Instances enough have been given to show that university graduates have in many cases attained positions of leadership in the industrial world. It remains to examine the connection between university training and success.

Is university training of practical value in business? Is it better to grow up in a business or to go to college and enter business afterwards? If the youth, destined for business, goes to college, what course of study will profit him most? To obtain light on these and similar questions, I recently asked for suggestions from some representative university graduates who have been conspicuously successful in Canadian industry. The replies were decidedly interesting. A prominent N.B. manufacturer differs from most graduates in saying that his university course was not of direct financial benefit. However, he adds: "It has been of considerable value to me in my public life. It has contributed very largely to the pleasure of life from a social standpoint and rendered much of my work, particularly in connection with my public duties, easier and more effective. I would advise everyone who can afford it to get a university education."

A Prominent Graduate of Queen's University

A prominent graduate of Queen's University, Mr. Geo. C. Mackenzie, president and general manager of the Electric Steel and Metals Company, Limited, to question 1 (as to the value of university training for the business man), responds emphatically. "Yes, most assuredly. Because it has given me an opportunity of knowing and making friends with many educated men. It broadened my viewpoint of life and taught me the value of reading and of making an effort to understand and appreciate the opinions of other men." To question 2 he replies: "I do advise Canadian manufacturers to send their sons to a university, whether they intend ultimately to go into business or to enter a professional career." As to the most useful course, Mr. Mackenzie writes: "I would

consider the following of first importance—History, political economy, and also a modern business course, such as has been recently included in the curriculum of one or more of our Canadian universities. These are, of course, the foundations only of the superstructure which must be built to meet the future requirements of the student."

Mr. G. B. Chadrey, manager of the Brantford works of the Massey-Harris Co., Ltd., writes an interesting letter:

"When I first started in business, it seemed to me that my university course was a positive disadvantage. I found that I was placed in the category of theorists, and that workmen of long experience were suspicious and inclined to resent a little the presence of anyone who had college training. This prejudice is bound to exist and can only be overcome by the steady reliable work of the graduate himself. In many businesses the handicap extends somewhat beyond the relationship with the workmen. It extends also to the management in those concerns where the management has been drawn from uneducated men. There is less of the feeling abroad to-day than there was when I began, partly because of the advertising that the whole question of education has been receiving and partly because of the advent of more progressive men in the management of many concerns.

"You ask in what ways I have found university training to be of benefit. In replying to this, I would point out that in starting by a specific training in a line which has a point of contact with business, an opportunity is afforded for service in this particular capacity, and through it, in allied and broader capacities. In my own case, my university training was, as you know, scientific. Through this I was able to take up first a comparatively limited line of work which was broadened from time to time. In recent years I have found a very positive advantage in the university training, in that is has secured a confidence in the minds of some of the most progressive men in our business.

"Another advantage which is very evident is the fact that the university course opens many doors which to the graduate seem naturally to be opened, but which, as a matter of fact, would otherwise be closed. I refer particularly to the relationship which it establishes with many other educated people, classmates at one time or merely college friends, who, as time goes on, come to occupy positions of importance in different lines of life. The main advantage, however, I think to be the fundamental one, namely, that the man of education is enabled on the average, through his training, to approach more varied lines of activity than he could attempt to do without the training he has received. In other words, the training is of value, and the better such training has been used by the individual, the better the individual is fitted to form judgments and to take an active part in business life.

"In replying to your second question, I would certainly advise manufacturers to send their sons to a university, if those sons are intended eventually to go into business. It would appear to me that this is preeminently the time when we should have in business the best trained minds available. There has never been a time when business has been so disturbed. We are in the midst of a tremendous upheaval, the consequences of which we cannot see. It is much more difficult than it was some years ago to keep on the right track and to keep alignment with the current of industrial events." . . . "In such circumstances we need not only men of character and the power of leadership, but men whose powers have been reinforced by such training as can only be obtained through education.

"It is, of course, impossible to state which subjects are of most value, but I would like to place a little emphasis upon the need of the study of economics and modern industrial conditions." . . . "We need far more than we have of general economic knowledge. Indeed, I think, that a good deal should be done, in fact must be done, in our public schools to instruct the youth along the lines of industrial knowledge. So far as the course the man is to take, I really do not think that it makes very much difference. If it has some specific point of contact with business life there may be some advantage, as I have already indicated, but much depends upon the sort of work which the man expects to follow when he enters business. A general course at a university may be an excellent training, but I believe it should always be coupled with a fair study of economic conditions."



T. A. Russell

An outstanding example of the University graduate who has made a success in business. Mr. Russell is a graduate of the University of Toronto and is now president and general manager of Willys-Overland of Canada, Limited

Another graduate, who is rapidly forging ahead in the business world, points out very closely what may be expected of a university course:

"I do not know that one should claim that the university course in Arts is in every case of direct value in a business career. However, the training one gets in the university, in almost any Arts course, should increase one's facility in making a study of a variety of problems, not particularly related to each other, and to that extent I think a university course is of direct benefit in business. It should make it easy to turn from one subject (whether the study of it is completed or not) to another, and develop the power of concentration on the most pressing problems of the moment. I think it can be fairly said that this faculty of concentration and the ability to switch from one subject to the other, is most noticeable among the university men that I have come in contact with in business life. A university course also seems to develop the ability to investigate a new problem, and the university man seems to be able to find his way about in a new field a little better than the average man who has not had the prolonged course of training that the university gives.

"In reply to the second question, I answer strongly in the affirmative (*i.e.*, manufacturers should give their sons university training). It does not follow that a university training will enable a manufacturer's son or anyone else's son to make a material success more quickly than one who has not had a university training. In fact, the money-making instinct will not, perhaps, be particularly developed by a university course, but the ability to handle the work in which one is engaged, should be developed.

"In reply to the third question, I think any course requiring a good deal of investigating work, particularly in sociological, political, and economic subjects, and the preparation of the results in reports or essays, makes a pretty sound training. I think the political science course, with, per-

haps, the featuring of more or less immediate economic or social problems, or the old English and History course, are about as suitable as any for a man thinking of going into business.

"Generally speaking, it seems to me that a university training should enable one to plan one's work to better advantage, because some sense of relative values should be attained."

One of the most valuable letters comes from a very able university graduate who has already won for himself an important place in Canadian industry:

"I have quite strong views that Canadian manufacturers ought to send their sons who intend to go into business to a university. Two courses are open when they do so. One is to take a course along the lines of the business in which they are interested, such as a mechanical or electrical course, if the business is along the mechanical or electrical lines. I think this is the preferable course if the son shows adaptability to mechanical subjects. If not, I think it better that he should take a general university course in the subjects in which he is proficient.

"The benefits from a technical course are obvious. I feel, however, that the benefits of an Arts course are also assured, because it is the training the man gets rather than the direct knowledge, that he finds of so much use afterwards.

"I think there is only one point of danger in connection with boys going through university courses, and that is, they may feel too old to start in at junior work after graduation. They must recognize, however, that this is an almost indispensable part of their training and that they should not be afraid to make a start even though the position is junior. The outlook they have, and the training they have received, will nearly always give them the advantage necessary for rapid promotion afterwards."

University Women in Industry

If a university course is an advantage to the young man who goes into business, one would expect young women to profit similarly. And this is the case. One of the most recent developments in business is the opening up of opportunities to women graduates to act as employment supervisors, welfare workers, efficiency experts, etc. A woman graduate, who has made an outstanding success in this type of work, writes as follows:

"I feel strongly that there is a big place in Canadian industry for University women, if employers of labor, especially female labor, are going to be awake to the signs of the times and follow the example of advanced manufacturers in Great Britain and the United States.

"In this age of specialization, the handling of people has come to be one of the last fields to be specialized. In a great many, indeed in most factories, much more thought is given to the care and selection of machinery than to that of the people who can make or mar the machine's power. It is to change this attitude that I believe a university woman can come in—men, too, of course, for where hundreds of men are employed men are needed, but where as in this mill the employees are two-thirds women, a woman can do more than a man, because she understands feminine tears and temperaments better. This job, as you know, is called Employment Management and with it, if it is well thought out, go all sorts of schemes to make working conditions good and as attractive as anything can be under the present industrial system. You know the plans which can be tried—supervision of general conditions, hours, rates, ventilation, cleanliness, rest rooms, lunch-rooms, first-aid and medical attention, recreation, libraries, training classes, etc. College helps for all these things, it seems to me. You learn there to dig things out and how to keep up with new ideas—and they are constantly being offered in this new game in industry. You learn, or should learn, through fairly wide contact with people to judge and select men justly, keenly (here I might mention that a very good training is fraternity pushing); of course you are often fooled in people, as your labor turnover unfortunately proves.

"If you contemplate a job in industry, you are wise to take all the economics and history you can get—some understanding of economics is essential, and the more the better as it saves time.

"I shall end as I began—none of this is new, all is sketchy. It does convey the idea that a college woman should be more many-sided and able to take hold of this particular problem of industrial relations from more angles than any other type of woman. The technical knowledge of a business is really easily got; any person can pick up a fairly good working knowledge in a short time. Personally I would just as soon tackle candy, sales, or laundry work as cotton."

An American Opinion

Some remarks of Charles M. Schwab (quoted from an article in the American Magazine) bear on the general topic. The American steel magnate says: "Whatever may have been true in the past, there is no doubt that to-day industrial conditions favor the college man. Old conditions are disappearing; science is dethroning chance. Business is conducted on so vast a scale that the broadening effects of higher education, gained through proper application, write a large figure." . . . . "Higher education has its chance later, when the college boy has mastered all the minor details of the business. Then, if he went to college with serious purpose, and studied hard and systematically, he has the advantage of a thoroughly trained mind to tackle larger problems, a mind which should be broader and more flexible because of its greater powers of imagination and logical reasoning."

To sum up, then, on this phase of the subject. In the light of the evidence, university training for the prospective business man is not a waste of time. On the contrary, it is distinctly to be desired. Other things being equal, the youth who goes into business at an early age is likely to be passed in the race by the university graduate. The college man has less training in the details of business but he will have more in the connection of cause and effect and in fundamental principles. His outlook should be wider.

What is Proper Course

It is true, of course, that in Canadian industry are to be found many successful men who have not had a university training, and among them some whose broad vision and generous culture move many a university graduate to envy. But that is not an argument against university training. These men have won through in spite of handicaps, not because of them. Their determination and ability have given them 'at a great price' what the university man of the same calibre may obtain with far less friction.

Agreed, then, that we send the boy to a university. What shall he study there? Large doses of economics, history, modern languages, perhaps the scientific course most directly related to the industry the student has in view—these, in the light of the experience of successful graduates, seem most likely to produce the desired result, *viz.*, a trained intelligence prepared to grapple with each problem as it arises, but already equipped with some special knowledge of the principles on which business is based.

So much for the past and the present. What of the future? Will industry draw more and more largely from the universities? That seems to be the trend of things at present, and not a few universities are taking active steps to make their connexion with the business world more intimate. An excellent illustration is the recent announcement by a Canadian

university of a four weeks' special course in employment management. What promises to be an important factor in the establishment of closer relations between the universities and business is the organization of a Bureau of Appointments by the University of Toronto. The idea has already been tried out both in England, where Cambridge has a highly successful Bureau of Appointments in operation, and in the United States at Harvard and Yale and many other universities. The plan is to gain the co-operation of employers who are likely to have openings for graduates and to keep in touch with graduates who are looking for jobs. At present the Bureau of Appointments of the University of Toronto is chiefly occupied with the placing of returned men and women—ex-students of course—in business positions. Later, it is hoped, its scope will be extended to include all members of the university who intend to go into business.

Obviously such organizations can do much to promote closer relations between universities and the business world. Graduates will find it easier to estimate the opportunities available. Moreover, a bureau of appointments can render a very real service to the employer who keeps in touch with it. The right sort of man is often hard to find. The bureau with a considerable constituency to draw from will aid in the search; and the university should be able from its record of students to give the prospective employer a very fair idea of their character and capacity. Professor R. M. MacIver, head of the Social Service Department of the University of Toronto, sees great possibilities in the plan. "The rarest of talents seem to me to be those involved in organization and enterprise. In the ordinary routine of things, men naturally rise to positions without necessarily possessing these talents. I think it possible in some departments of university work to select men of this type. Four years work with groups of young men give very definite ideas of their qualities, character, and powers of initiative. We can select a few with considerable confidence."

This latest attempt to bring the university and business into closer touch will be watched with interest and sympathy. Its success will mean much both for higher education and for Canadian industry.

Recent Activities of Prairie Provinces Division

By G. E. CARPENTER
Secretary, Prairie Provinces, Division, C.M.A.

AT its meeting on September 9th, the Winnipeg Trades and Labor Council again refused to nominate persons for appointment upon the Industrial Tribunal authorized by an Act of the Legislature at its last session, for the purpose of investigating and reporting upon matters affecting labor and with reference to disputes between workers and employers. The Winnipeg Branch of the Association nominated its representatives for appointment and it was hoped that the Trades and Labor Council would view the matter in a different light and change the attitude that had been adopted towards the Government's efforts to bring about better relations between employees and employers, but apparently the members of the Council are not as yet willing to do this. However, it is possible that with the result of the National Industrial Conference before them they may decide to nominate representatives for appointment on the Industrial Tribunal in the near future.

Demurrage During Strike

Up to the present time it has been found impossible to reach any satisfactory conclusion with the representatives of the railways regarding assessments of car rental during the general strike, and it looks as though reference would have to be made to the Board of Railway Commissioners in a friendly way in order to dispose of this matter.

Members will be pleased to learn that the penalty system for delay to railway cartage teams referred to last month has, according to advice received from the cartage companies, materially increased their efficiency. A continuation of the co-operation of all members in Winnipeg is requested in the prompt handling of cartage teams so that the maximum service may be obtained therefrom.

Trade Enquiries

An arrangement has been made with the Department of Trade and Commerce, Ottawa, whereby the names of persons with respect to trade enquiries appearing in the weekly bulletin of the Department can be furnished direct from the Winnipeg office. Members are invited to avail themselves of this service.

Applications for membership have been received from the following firms:—

Globelite Battery Company, Winnipeg.
Giddings Limited, (additional), Winnipeg.
O-Ribo Manufacturing Company, (additional), Winnipeg.
Burgess Batteries Limited, Winnipeg.
The Dyson Vinegar Company, Winnipeg.
Central Tools and Forgings Limited, Winnipeg.

Paper Exports Increase

July Figures Recently Issued Show that Newsprint Exported Was Worth $4,000,000

Canadian exports of paper and paper products of all kinds for July show an increase in value of $1,007,984, as compared with those in July, 1918, although the value of the pulp and pulpwood exported during the month shows a decrease, that of pulpwood alone falling off by $1,019,357. The details show:

	July, 1918.	July, 1919.
Paper, etc.	$3,631,241	$4,639,225
Pulp, chem.	2,754,010	2,654,333
Pulp, mech.	459,868	436,604
	$6,845,119	$7,730,162
Pulpwood	2,253,884	1,234,527
Total	$9,099,003	$8,964,669

The quantity of newsprint paper, the industry's chief staple, exported during the month amounted to 57,323 tons, valued at $4,064,303.

For the first four months of the fiscal year exports of paper and paper products show an advance in value of $3,045,299, as compared with the corresponding period in 1918, and $6,321,373, as compared with 1917. There was a falling off of $5,225,530 in the value of chemical pulp exported during the period as compared with the 1918 returns and of $991,454 as compared with those of 1917. Mechanical pulp also fell off slightly while the value of the pulpwood exported in 1919 was about half that for the same period in 1918.

Catalogues and Booklets

Bawden Pumps

The Bawden Machine Co., Limited, of Toronto, have issued a well-illustrated booklet describing the Bawden line of pumps. By means of special sectional drawings, the principle of the pumps is thoroughly explained. The various designs and series of pumps are likewise illustrated, with full description and specifications. The booklet contains 42 pages and is full of information, which will be of value to those concerned with the power problem in factories.

Electric Arc Welding

The Canadian Westinghouse Company, Limited, Hamilton, present a useful publication of 48 pages, describing in detail the application of electric arc welding. During the last few years, they point out, an unusually rapid advance has been made in the process and it has now become recognized as an art very essential to a number of industries. The field of electric arc welding is unlimited and practically every industry employing iron and steel, or other alloys, can utilize it to advantage. All of which makes the description contained in the present booklet of value. There are copious illustrations, which add to the effectiveness of the treatise.

Manufacturing Facilities Offered

A handsomely designed booklet intended to illustrate the facilities afforded by the Leaside Engineering Company, Limited, for the handling of general engineering work on a large scale, is being circulated by the company. There are five companies associated with the organization, including the Leaside Engineering Company, the Leaside Munition Company, the St. Catharines Steel & Metal Company, the Laurentian Power Company, the Ferro-Silicon plant and the Canada Wire & Cable Company. The various plants are effectively illustrated and their equipment briefly described.

Industrial Development Farmers' Best Friend

(*Continued from page* 56)

idea. The community, in visualizing industrial development, had visualized only smoking chimneys and roaring machinery.

The rolling mill dismally failed. The community, having lost part of its money on the rolling mill enterprise, devoted the balance to the development of the stone. To-day that same stone industry in that community employs more men and turns out more product than was even promised in the prospectus of the rolling mill enterprise. If your industrial development is controlled by the laws of natural selection; if you undertake the things that are nearest at hand in point of raw materials and markets, your efforts will merit and receive a measure of success that will not be disappointing.

I have said your population will increase. An especially instructive comparison of immigration and population statistics has been recently compiled by Mr. Watson Griffin, in a book entitled "Canada, the Country of the 20th Century." In this treatise Mr. Griffin predicts that before the end of the present century Canada will have a population of over 75,000,000 souls.

It is further pointed out that your foreign trade to-day is greater than was that of the United States when our population was 50,000,000.

An interesting comparison might be made with reference to population and industrial production between your three provinces here, the so-called prairie provinces of Canad and the Northwest territory in the United States, includin the States of Ohio, Indiana, Illinois, Michigan and Wisconsi I am informed the population of your prairie provinces i 1916 was 1,698,220, and the value of your manufacture products in 1916 was $105,000,000. In 1860 the populatio of the States composing the Northwest territory was 6,919,00 and the total value of the manufactured products was $28 418,000. The value of manufactured products therefore t each inhabitant in the States composing the Northwest te ritory was, in 1860, $40; while the value of manufacture products in the prairie provinces under your last census $61. This is especially interesting in view of the fact tha the agricultural production of the territory I have name in the United States was in 1860 much larger in proportio to population than was the value of manufactured product

The advent of quick transportation, quick communicatio improved machinery, and equipment in both agriculture an manufacture, should and will increase the rate of you progress to a degree I should not dare to predict.

These, then, are some of your problems, and these ar some of the victories which will be yours for the solutio and yours for the winning.

Change in Control of Industry

Business of John Lysaght, Limited, Bristol, Passes Unde Control of Welsh Financiers

Controlling interest in the business of John Lysagh Limited, Bristol, England, has been secured by Mr. H. Seymou Berry, of Merthyr Tydvil, Wales, and his associates, Vi countess Rhondda and Mr. D. R. Llewellyn, known as th "Coal King" in South Wales.

The remarkable success of the Lysaght business, whic has been described as one of the romances of British industr had attracted the attention of Mr. Berry, who had for severa months been negotiating for the purchase of the stock hel by the heirs of the late Mr. John Lysaght. The deal wa finally carried through, and Mr. Berry becomes chairman o the company, Mr. Llewellyn, vice-chairman, with Viscountes Rhondda and two other new directors representing the Wels interests. The management, however, will be unchanged, a Messrs. S. R. Lysaght, the managing-director, W. R. Lysagh manager of the steel works and rolling mills, D. C. Lysagh and H. G. Hill, who have for years directed the company affairs, will remain on the board.

The cost of securing control is said to have been approx mately £5,000,000, although the total capitalization was onl £1,000,000. The actual value of the properties, however, immensely greater, the cost of the blast furnaces and ste works alone having been over £2,000,000, nearly all paid fo out of accrued profits.

The company has always paid special attention to th export trade, especially within the Empire, having branc houses in Australia, New Zealand, Canada, South Africa an elsewhere. In Australia, where they have a specially larg trade, they have been erecting their own iron and steel work in line with the Commonwealth's policy of developing its ow mineral resources. While they have not yet manufactured i Canada, they have had a branch of the company establishe for many years past, in charge of A. C. Leslie & Co., Limite Montreal, who have been agents for the company's product for over fifty years. Canadian users of sheets will, therefore be specially interested in this new development, and there i every reason to believe that the future policy of the compan will include an active campaign in Canada, whether the should decide to manufacture here or to continue shippin the sheets made in Great Britain.

New Customs Rulings

The Tariff Department reports that the principal Customs rulings and Board of Customs decisions issued by the Customs Department since the annual meeting are as follows:

One multiple three-drum inspecting spooler machine for fabric manufacture, ruled to be dutiable under item 468.

One 7-inch two-feed improve automatic sweater machine ruled to be dutiable under item 468.

Silver alloy ingot, per sample, for use for dental purposes, hitherto admitted free as sterling silver, ruled to be dutiable by the Board of Customs under item 711.

Jute cloth, paper lined, for the manufacture of bags, ruled by Ottawa to be dutiable under item 538 at 25 per cent.

Machine for rolling and measuring cloth, ruled to be dutiable under item 468.

One shearing machine and one traverse grinder, ruled to be dutiable under item 468.

Salt blocks, medicated, per sample, ruled to be dutiable under tariff item 220 at 25 per cent.

In connection with the recent tariff changes an amendment was reported to the law which admits crude cotton seed oil free of duty when for refining purposes.

Needles for Tricot and Milanese weaving or knitting machines, being of a class or kind not made in Canada, ruled to be dutiable under tariff item 468, at 10 per cent. ad valorem. Under this item foreign goods are subject to the war tariff, but British goods are not.

Velour hoods, per sample, ruled to be dutiable at 35 per cent. general tariff, under item 626.

Diarsenol, Bordet's Bacillus, Ampsalvs and Neo-Diarsenol (vaccines), ruled to be exempt from the war stamp tax.

Glaziers' diamonds, ruling obtained that they may be exported for repair conditional on return on payment of duty on the value of the repairs.

Ruling that certain hat braids, per samples, are free of duty.

Ruling that strawberry pulp, per sample, is dutiable under item 106, same as jam.

Pulley lagging, per sample, for covering the outside of pulleys, ruled to be dutiable as coated cloth under item 562.

Oil cans for agricultural implements, ruled to be dutiable according to material.

Unexposed moving picture films, ruled to be entitled to entry under item 696, when imported on orders from societies or institutions entitled to enter goods under this item.

Spraying machines, ruled to be dutiable under item 448 as being agricultural implements, n.op.

Oakite Composition No. 1, from the Oakley Chemical Co., New York, essentially a soap cream, and ruled to be dutiable under tariff item 228.

Raybestos brake lining, with brass wires therein, dutiable under tariff item 352.

Benzol, xylol, and solvent naphtha, ruled to be dutiable under tariff item 711.

National powdered wax for dancing floors from Candy & Company, Chicago, ruled to be dutiable under tariff item 252.

Old English floor wax from the A. S. Boyle Co., Cincinnati, Ohio, ruled to be dutiable under tariff item 252.

Essenkay tire filler from the Essenkay Products Co., Chicago, ruled to be dutiable under tariff item 711, and when tire setters accompany such shipments, setters are to be separately rated.

Bituminized paper or fibre conduit for carrying telephone wire, etc., ruled to be dutiable under tariff item 199, in accordance with the Board of Customs decision of 12th August, 1919, ruling creosoted fir duct or conduit under tariff item 506. Ruling on this material in Appraiser's Bulletin No. 327, page 11, should therefore be cancelled.

Silver alloy in powdered form, per sample, composed of silver, tin, copper and zinc, declared to be dutiable under tariff item 711.

Wire, under tariff item 403*a*, when imported for use in the manufacture of wire ropes, declared that such rope should be composed of wire in strands, and the strands woven or twisted together.

Tariff status of locomotive and car wheel tires of steel, partly machined, declared that locomotive or car wheel tires of steel, wholly or partly machined are dutiable under tariff items 393 or 454.

Creeper belts, if malleable sprocket chain and link belting chain or steel, for the manufacture of farm tractors, declared to be dutiable under tariff item 411, in effect from 6th June.

Transmission belts used to connect engines with separators, etc., declared to be dutiable as belting under tariff items 609 and 610—in effect from 6th June.

Belts (other than transmission belts, connecting engine with separator, etc.), imported for repairs of articles enumerated under item 447, declared to be dutiable under tariff item 447, in effect from 6th June.

Miller feeders, for Gordon presses and folding machines declared to be dutiable under tariff item 453.

Garters and hose supporters declared to be dutiable according to material.

Finished parts of garters and hose supporters declared to be dutiable according to material.

Steam road rollers declared to be dutiable under tariff item 448.

Slate slabs, per sample, imported to be re-sized, milled and finished for electrical and other purposes, declared to be dutiable under tariff item 310.

Slugs and leads in strips, to be used in printing, declared to be dutiable under tariff item 340.

Creosoted fir duct or conduit, for carrying underground telephone wires, declared to be dutiable under tariff item 506.

Hickok automatic paper feeders, for use in connection with bookbinders' ruling machines, declared to be dutiable under tariff item 453.

Rings and novelties, per samples, for placing on candy sticks, or in popcorn or prize packages, declared that such rings and novelties of base metal only, for the above purposes, dutiable as toys under tariff item 624.

"Oxone," dry, per sample, manufactured by Roessler and Hasslacher Chemical Co., New York, declared dutiable under tariff item 220.

Automobile bodies (metal) unfinished, per illustration and description, declared to be dutiable under tariff item 454.

Order-in-Council for the extension of the preferential tariff on tea, to include teas now in excise bond. Where tax has been paid on such teas entered ex-excise bond on or after the 6th day of June, 1919, a refund of three cents per pound may be applied for.

Referring to Order-in-Council of March 26th, 1918, which provides:

> "That all machinery, plant and material of whatsoever nature or kind required in the construction of the necessary mill, power facilities, steel making equipment, etc., to produce the steel plates covered by this proposal, shall be admitted into Canada free of all Customs duties."

In view of these provisions the Customs Department will grant a drawback of duty on materials entering into the manufacture of articles sold by Canadian manufacturers to the Dominion Steel Company, to be used in connection with the plate mill referred to.

Transportation Items

Service to Roumania

Space for Commercial Shipments Will be Available on Boats Sailing in November

The Canadian Trade Commission, who have been handling certain shipments for various manufacturers consigned to the Roumanian Government, advise that there may be space available on vessels chartered by the Roumanian Government to handle the Government orders mentioned, which can be utilized for commercial shipments. This being so, we have been requested to make this announcement so that our members may, if they wish to do so, take advantage of this space for any commercial business which they desire to ship to that country. The sailings on which this space may be available will be in November and January, the November sailing from Montreal, and the January sailing from Halifax, ocean rates to be on about the same basis as those in effect from New York. The boats will touch at Galatz, Roumania.

Any interested members desiring to use this service should get in touch with the Shipping Department of the Canadian Trade Commission at Ottawa.

Vancouver to Australasian Ports

Canadian Government Merchant Marine to Put Boat in Service from Vancouver to Australia and New Zealand Early in December

The *Canadian Raider* will be placed on the berth at Vancouver to load for Australasian ports about the 1st of December. It is suggested that members in a position to supply cargo for this sailing should get in touch with Mr. A. Brostedt, Assistant General Freight Agent, Canadian National Railways, Vancouver, or with Mr. D. O. Wood, Traffic Manager, Export and Import Department, C.N.R., Royal Bank Building, Toronto. These gentlemen will be pleased to arrange for space and supply any other information including rates.

It is understood that the rates will probably be in the neighborhood of $40.00 per 1,000 sq. ft. for lumber, and $20.00 per ton, weight or measurement ship's option, for general merchandise. All rates are subject to change without notice until confirmed.

Steamship Sailings from Montreal

Ships Scheduled to Sail for Various Points During Early Part of October

The following useful information regarding the sailings of steamships from the port of Montreal to various trans-Atlantic ports is furnished in a bulletin issued by the Canadian Pacific Railway. It will doubtless prove of service to exporters:—

To Liverpool.

Scandinavian	C.P.O.S. Line	A'bt	Sep. 23
Metagama	C.P.O.S. Line	A'bt	Sep. 24
Canadian Miller	Can. Govt. Merchant Marine, Ltd.	Ab't	Sep. 27
Canadian Ranger	Can. Govt. Merchant Marine, Ltd.	Ab't	Sep. 30
Megantic	White Star-Dominion Line	Ab't	Sep. 30
Melita	C.P.O.S. Line	A'bt	Oct. 1
Canadian Seigneur	Can. Govt. Merchant Marine, Ltd.	Ab't	Oct. 11
Minnedosa	C.P.O.S. Line	Ab't	Oct. 16

To London.

War Peridot	C.P.O.S.-Furness Line (C.P.O.S.)	Ab't	Sep. 23
Mendip Range	C.P.O.S.-Furness Line (Furness)	Ab't	Sep. 24
Montezuma	C.P.O.S.-Furness Line (C.P.O.S.)	Ab't	Sep. 24
Dunbridge	C.P.O.S.-Furness Line (C.P.O.S.)	Ab't	Oct. 4
Vardulia	Cunard Line	Ab't	Oct. 9
Tunisian	C.P.O.S. Line	Ab't	Oct. 10
Willaston	Cunard Line	Ab't	Oct. 14
Vellavia	Cunard Line	Ab't	Oct. 21

To Antwerp.

Glenspean	C.P.O.S. Furness Line (Furness)	Ab't	Sep. 25
War Beryl	C.P.O.S. Furness Line (C.P.O.S.)	Ab't	Oct. 24

To Glasgow.

Cabotia	Anchor-Don. Line	Ab't	Sep. 23
Corsican	C.P.O.S. Line	Ab't	Sep. 28
Cassandra	Anchor-Don. Line	Ab't	Sep. 30
Montcalm	C.P.O.S. Line	Ab't	Oct. 8

To Avonmouth Dock (Bristol).

Cornishman	Dominion Line	Ab't	Oct. 2
Dominion	Dominion Line	Ab't	Oct. 14
Monmouth	C.P.O.S. Line	Ab't	Oct. 14
Pretorian	C.P.O.S. Line	Ab't	Oct. 15
Virgilia	Cunard Line	Ab't	Oct. 16
Copenhagen	Cunard Line	Ab't	Oct. 19

To Manchester.

Manchester Brigade	Manchester Liners	Ab't	Sep. 25
Manchester Corporation	Manchester Liners	Ab't	Oct. 2
Manchester Hero	Manchester Liners	Ab't	Oct. 18

To Hull.

Maplemore	Furness Line	Ab't	Oct. 2

To Leith.

Cairnvalona	Thomson Line	Ab't	Oct. 7
Cairndhu	Thomson Line	Ab't	Oct. 10

To Dublin.

Carrigan Head	Head Line	Ab't	Oct. 5
Ramore Head	Head Line	Ab't	Oct. 27

To Belfast.

Ballygally Head	Head Line	Ab't	Oct. 8
Fanad Head	Head Line	Ab't	Oct. 18

To St. Nazaire (France).

Alston	Can.-French Line	Ab't	Oct. 15

To Havre (France).

Honduras	Canadian-Trans-Atlantique Line	Ab't	Sept. 24
Calafornie	Canadian-Trans-Atlantique Line	Ab't	Oct. 1
Lord Dufferin	Canadian-Trans-Atlantique Line	Ab't	Oct. 10
Kamarina	Canadian-Trans-Atlantique Line	Ab't	Oct. 15

To Christiania and Bergen (Norway).

Ranenfjord	Norwegian-Amer. (C.P.O.S. Agents)	Ab't	Nov. 1

To Buenos Aires and Monte Video.

*Canadian Pioneer	Can. Govt. Merchant Marine, Ltd.	Ab't	Sep. 25
*Canadian Settler	Can. Govt. Merchant Marine, Ltd.	Ab't	Oct. 15
Clan McWilliam	Houston Lines	Ab't	Oct. 25

*Buenos Aires only.

To South Africa.

Cape Town, Port Elizabeth, East London, Durban and Delagoa Bay.

New Texas	Elder-Dempster Line	Ab't	Oct. 5

To Australasian Ports.

Melbourne, Sydney, Auckland, Wellington, Lyttleton and Dunedin (Port Chalmers).

Kaikoura	New Zealand Shipping Co.	Ab't	Sep. 27

To Barbados, Trinidad and Kingston.

Canadian Recruit	Can. Govt. Merchant Marine, Ltd.	Ab't	Sep. 30

To Havana (Cuba).

Canadian Sailor	Can. Govt. Merchant Marine, Ltd.	Ab't	Oct. 7

To St. John's (Newfoundland).

Canadian Volunteer	Can. Govt. Merchant Marine, Ltd.	Ab't	Sep. 30
Canadian Adventurer	Can. Govt. Merchant Marine, Ltd.	Ab't	Oct. 15

New Steamship Service

Canadian Pacific Ocean Service Announces a Line to Scandinavian Ports

The Canadian Pacific Ocean Services, Limited, have recently announced that they had been appointed agents for the Norwegian-American Steamship Line, which intends to inaugurate a service of one sailing per month from Montreal for the balance of the season of navigation, and one sailing per month from St. John for the winter, to be followed next summer by two sailings per month. The first steamer will sail from Montreal about the end of October, the name of this boat being the *Renenfjord*, sailing direct to Christiania, Norway, and probably to Bergen and Stavanger of the same country.

Interested members having any cargo to offer, or being in a position to use this service, should get in touch with the representatives of the Canadian Pacific Ocean Services, Lim-

ited, Mr. J. R. Clancy, General Agent, C.P.R. Building, Toronto, or Mr. G. D. Robinson, European Freight Agent, Board of Trade Building, Montreal. Shipments for Gothenberg, Danzig and Helsingford can also be handled via this service.

Condensed Advertising

SOUTH AMERICAN TRADE

A gentleman with eleven years' experience in South America, being well acquainted with conditions in all the republics, and having a thorough knowledge of language, business customs, legal usage, tariffs, transportation, etc., offers his services to Canadian manufacturers to place their products in those markets in a trip which he contemplates taking at the end of October. Box 4600, INDUSTRIAL CANADA.

TRADE WITH WEST INDIES

Opportunity to develop Trade with West Indies, etc. Business man leaving shortly for Bermuda, British West Indies, and South America, seeks agencies from Canadian manufacturers. Real pusher, determined to promote trade of the "Made-in-Canada" products. Best of references furnished. Apply Box 4400 INDUSTRIAL CANADA.

GRADUATE REQUIRES POSITION

Position required as Industrial Nurse in large manufacturing plant. Graduate of Toronto General Hospital with six years' experience. Box 4500 INDUSTRIAL CANADA.

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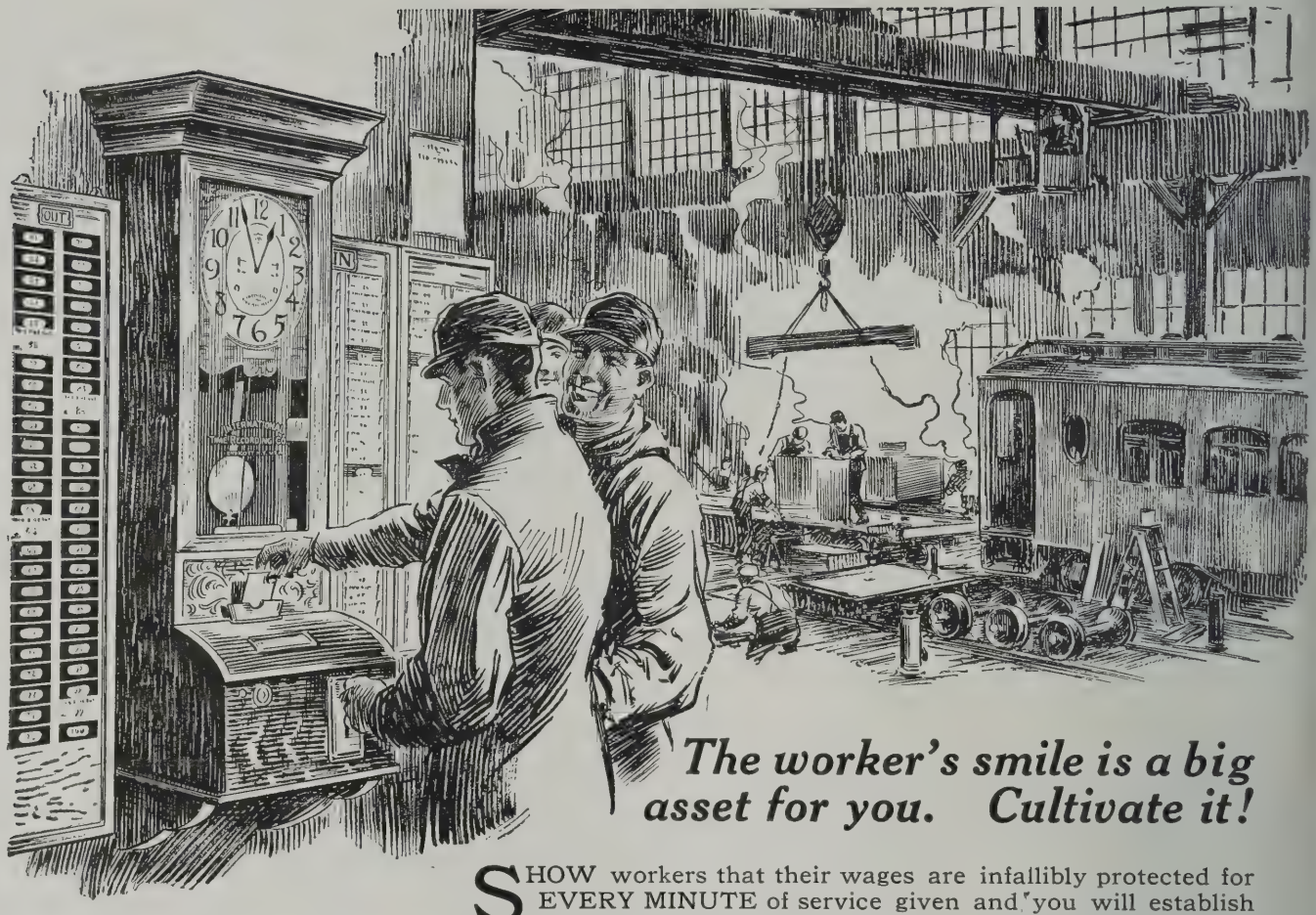
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The worker's smile is a big asset for you. Cultivate it!

SHOW workers that their wages are infallibly protected for EVERY MINUTE of service given and you will establish a basis of understanding and harmony which can not be attained in any other way.

Such a positive guarantee of payroll accuracy and satisfaction is made possible by

INTERNATIONAL TIME RECORDERS

The confident smile of the worker who records his time on an International is a genuine asset for you. It means freedom from payroll disputes. It stands for close, profitable co-operation between employees and management. It is the mark of a satisfied, capable producer.

All manually-controlled timekeeping systems are subject to uncertainties. They depend for success upon unerring human attention---*and we humans are not unerring.*

Internationals, on the other hand, are *automatic.* They leave nothing to chance. They keep all necessary payroll data, correct to-the-minute, clearly printed for quick, errorless computation.

Internationa's are made in 260 models, either electrically-operated or spring-driven, and adapted to all lines of business. May we show you how YOUR requirements can be filled perfectly?

Other INTERNATIONAL *Products*

In addition to the Card Time Recorder, shown in the accompanying illustration, the International Business Machines Company, Limited, manufactures

- Card Time Recorders
- Dial Time Recorders
- Job Recording Devices
- Electric and Self-Winding Master Clocks
- Autograph Recorders
- Secondary Clocks
- Time Stamps
- Key Recorders
- Program Devices
- Recording Door Locks
- And a full line of kindred devices.

We will gladly send full data concerning any of the above instruments on request

International Business Machines Co., Limited

Head Office and Factory:
300 Campbell Ave., Toronto

FRANK E. MUTTON
Vice-Pres. and Gen'l Mgr.

Also at
Montreal, Winnipeg, Vancouver

(Also Makers of Dayton Computing Scales and Hollerith Electric Tabulators)

"..... not worth the paper they are written on"



International Job Recorder
"Made in Canada"

We refer to Production Cost Figures that depend on pencil records.

What pencil records?

The time-cards on job work that your workmen or foreman now fill out in pencil.

Why aren't they good in pencil?

Because pencil records can be changed and a working-time balance can be forced.

And, as we have said, if your factory production costs are "leaky" the whole question of your costs, your overhead, etc., is "up in the air."

The International Job Recorder absolutely corrects this condition. It enforces a printed, machine-made, unchangeable, infallibly accurate record of the time spent on any job.

It does many other profitable things for its users. Let us tell you more about them.

International Business Machines Co. Limited

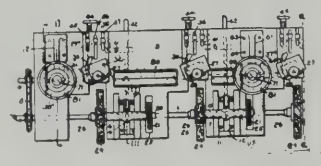
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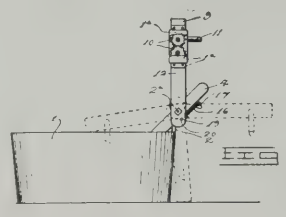
Also at - Montreal
Winnipeg Vancouver

(Also makers of Dayton Computing Scales and Hollerith Electric Tabulators)

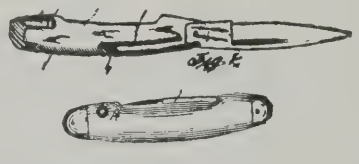
PATENTS FOR SALE



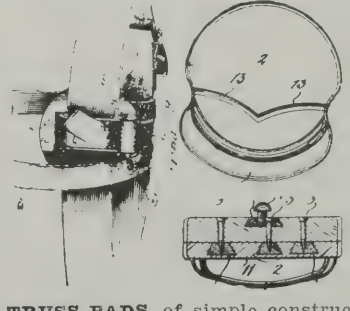
PIPE POLISHING MACHINE, whereby the polishing mechanisms are automatically shifted to operative position by the pipe during its travel, increasing the output as well as reducing the cost of production, and is provided with means for the continuous feed of the pipe. For further particulars apply to the inventor, E. C. Straub, R. 905, 7th Ave., Beaver Falls, Pa., U.S.A., who offers pat. rights in the Dom. for sale.



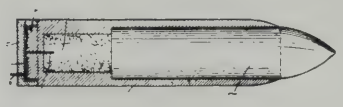
WRINGER SUPPORT, provided with a novel bracket for holding the wringer so that it may be swung backward or forward as desired and having a device for locking the wringer in wringing position. Pat. rights in the Dom. are for sale by Andrew J. Steel, Box 473, Needles, California, U.S.A.



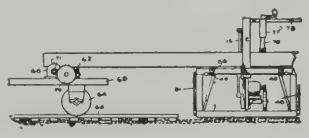
POCKET KNIFE, of durable construction, attractive design; may be cheaply manufactured, and should prove a good seller. The inventor, Mr. John T. Peters, Tilting, Newfoundland, is open to negotiation for disposal of his pat. rights. John T. Peters, Tilting, Newfoundland.



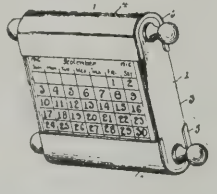
TRUSS PADS, of simple construction, light and cheap to manufacture, adaptable and comfortable. Consists of analogous material strongly reinforced by aluminum or other suitable metal or alloy, with improved means for strongly and comfortably mounting it on the body. For further particulars apply to the inventor, Mr. James W. Embree, Box 236, Manhattan, Kansas, U.S.A., who offers patent rights for sale.



SHELL of high velocity, having a variable range; is simple in construction and provided with means whereby its range can be automatically regulated. Parties interested should address communications to Mr. J. M. Nurmi, 882 Putnam Ave., Detroit, Michigan, U.S.A., who is open to arrange for the disposal of his interest in same.



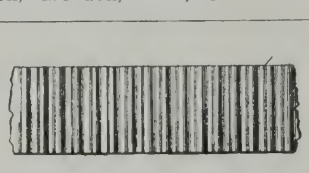
JIG SAW, a strong, durable and efficient saw. It is easily manipulated and may be placed on the market at a minimum cost in view of its simplicity construction. The inventor, James DuLaney, 159 Melrose Avenue North, Seattle, Wash., U.S.A., is desirous of getting in touch with a reliable manufacturer with a view to disposing of his interest in this invention or arranging manufacture of same.



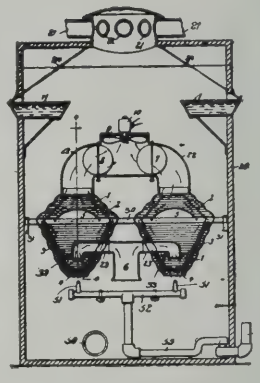
ROLL CALENDAR, a simple, attractive and ingenious calendar, may be cheaply manufactured and placed on the market at a minimum cost, with reasonable profit. Patent rights are for sale by Isaac W. Townsend, Lake View Hotel, Port Arthur, Texas, U.S.A.



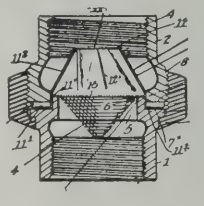
NEEDLES, for use in connection with the sewing of Leather, Rubber, Belting, canvas or the like. May be cheaply manufactured and is superior to any that has yet been placed on the market. It eliminates the difficulties now found in the use of the present device of this character, is simple and convenient. Patent rights are for sale by Martin Larson, Glendon, Alta., Canada.



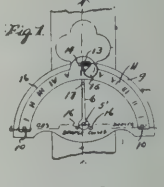
MARGINAL STRIP FOR BOOTS, composed of strong corrugated paper, which is attached to the outside edge of the vamp, tip or foxing with zigzag or over-edge stitching, thus increasing the area to the desired size. The patent rights in the Dominion are for sale by Hiram Holden, 561 East Spruce Street, Manchester, N. H., U.S.A.



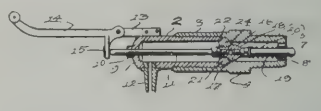
NEW MEANS AND SYSTEM OF HEATING, invented by Mr. Terry, is pronounced the Wonder Heater of today. Provides absolutely free heating in the home, is based on strictly scientific methods. Interested parties should address all communications to the inventor, Mr. A. Terry, 74 Grenada Terrace, Springfield, Mass., U.S.A., who is open to negotiations for the disposal of his interests or rights to manufacture his invention in the Dominion.



GAS CONTROLLER AND PURIFIER, to be interposed in the supply pipe between the meter and burner, which will increase the velocity of the gas flow and draw in a greater supply of air into the gas through the burner at the point of consumption and at the same time will eliminate gas hammer in the pipe due to sudden checking or stopping of the flow. Patent rights in the Dominion are for sale by Harold E. Thatcher, 119 Front St., Sarnia, Ont., Canada.

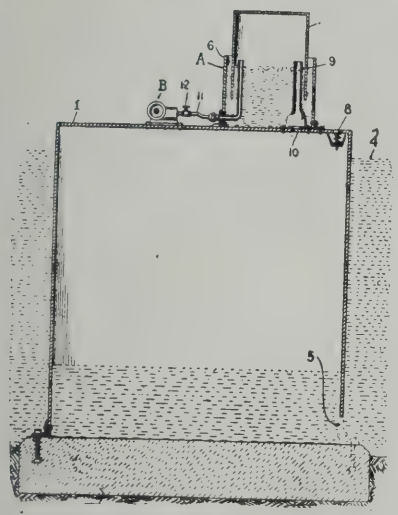


LOCK DAMPER, a device to eliminate the difficulty experienced in finding out the exact position of the damper in a pipe used in connection with stoves, furnaces, etc., by the use of this ingenious device the position of the damper may be at any time ascertained, no chance of overdraft or vibration displacing the position of same, provides a convenient indicator, safety device and fuel saver. Patent rights in the Dominion are for sale by Madison Hamm, Box 218, Glen Cove, Nassau County, Brookside, L.I., N.Y., U.S.A.

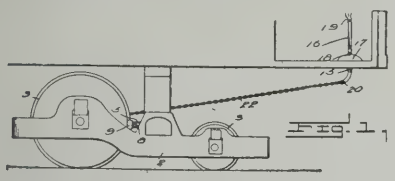


VALVE, a simple, durable and efficient device, may be manufactured and sold at comparatively low cost. Consists of a valve seating having beveled valve engaging surfaces or faces upon each side whereby the valve seat may be readily reversed when the valve engaging surface has become worn. For further particulars apply to Mr. V. A. Lang, 406 Willard St., Houston, Texas, U.S.A., who offers patent rights in the Dominion for sale.

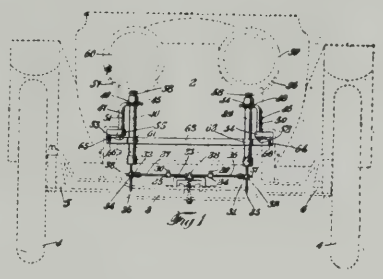
PATENTS FOR SALE



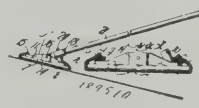
AIR COMPRESSOR, providing a simple and powerful means for compressing air; provides for free and unlimited power and eliminates the cost of fuel; is entirely automatic in operation and cost of up-keep is very small. Patent rights in the Dominion are for sale by F. E. Renouf, Bowsman River, Man., Canada.



CAR BRAKE, particularly adapted for use on trolley cars, easily applied, and when in this normal position is in locking engagement with the wheels of the car, the movement of the controlling lever by the motorman serves the purpose of rendering the brake inoperative. Patent rights in the Dominion are for sale by Mr. Geo. W. Leach, P.O. Box 203, Pittsboro, N.C., U.S.A.

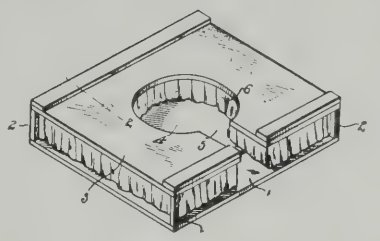


DIRIGIBLE LAMP, so arranged that the part of the roadway in front of the automobile, while going around curves, will be illuminated. May be thrown into and out of operation when desired. Patent rights in the Dominion are for sale by S. J. Welch, Hotel Welch, Troy, Pennsylvania, U.S.A.

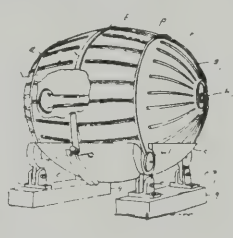


MOP, for cleaning and polishing surfaces with a minimum of labor and fatigue, obviates the arduous task of scrubbing and polishing by hand, and will give the efficient effect of hand labor. May be used with water for washing floors, with oil for polishing, or simply as a duster. The inventor is desirous of disposing of patent rights on his invention in the Dominion or to arrange with a reliable manufacturer for manufacture of same. Inquiries should be addressed to Messrs. McInerney, McInerney & Williams, 89 Queen St., Melbourne, Australia, or Harold C. Shipman & Co., Ottawa, Ont., Canada.

PATENTS
Trade Marks, Design
Patents, Copyrights



HOVER, by means of which the brooding capacity of a hen is increased to any desired extent, and enables one hen to care for a large brood of chicks. The inventor, Mr. Fred F. Hughes, 2078 Oak St., Hillsboro, Ore., U.S.A., offers patent rights in the Dominion for sale.



HOG OILER, efficient, economical and practical device, will kill lice, mange and do away with diseases and pests which hinder the thriving of hogs. Patent rights in the Dominion are for sale by Mr. C. S. Andrews, care of Council Bluffs Remedy Co., Council Bluffs, Iowa, U.S.A.



HAME FASTENER, adapted to lie in position and will hold up the martingale while the neck-yoke is taken off, thus saving the time required to pass the breast strap through the martingale. The inventor, Mr. Wilfred Curry, Balgonie, Saskatchewan, Canada, offers Patent rights in the Dominion for sale.

Manufacturers interested in patents should have their names on our Service Dept. mailing list.

Ask for our Booklet on Patents, "Patent Protection"

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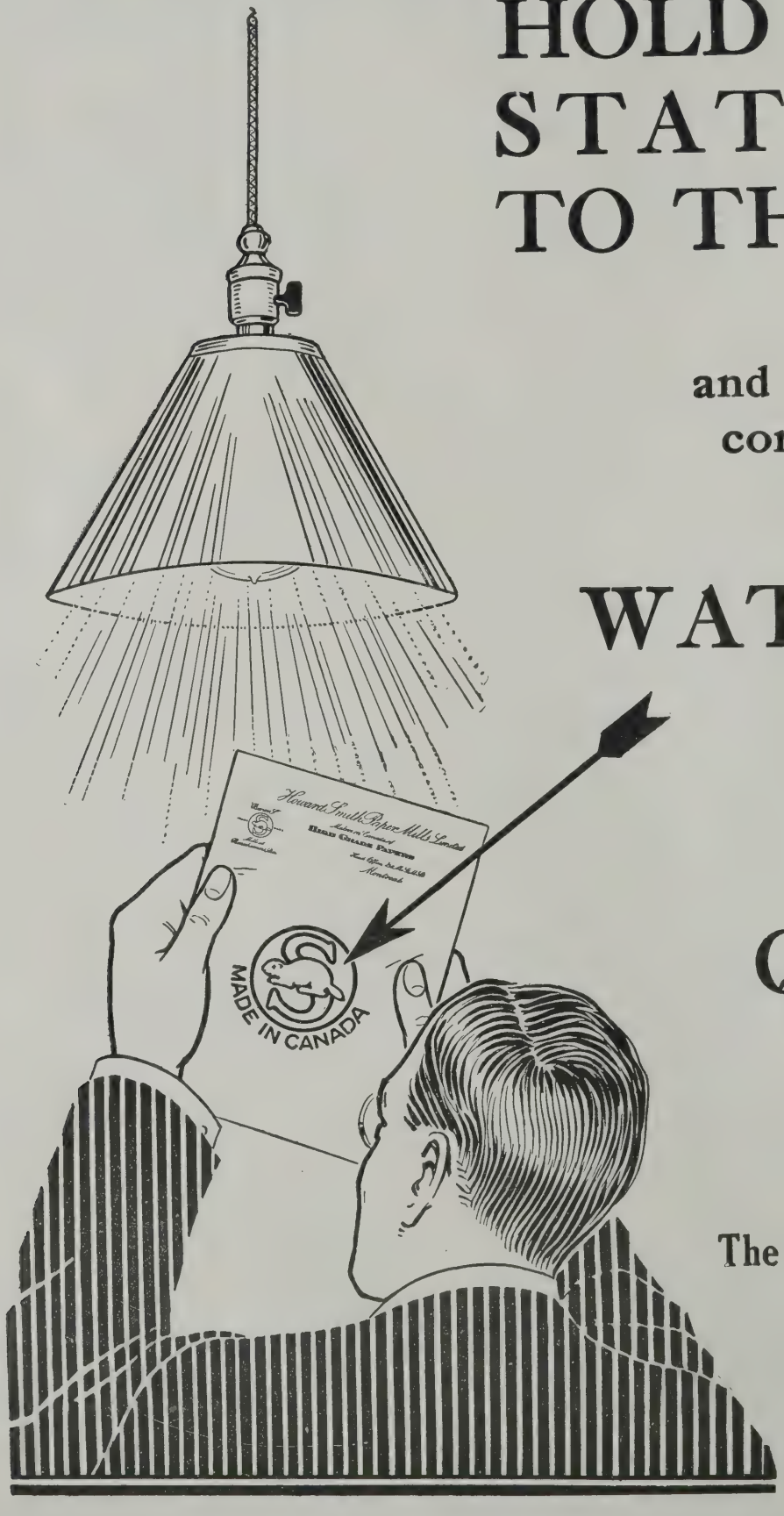
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OFFICE AND FINANCE

The Necessity of Knowing Manufacturing Costs

Unless the Exact Cost of Each Department is Known, Waste of Materials, Inefficient Help, or Careless Supervision in Buying Will Not be Reported

By ROLAND H. ZINN
Chief, Cost Accounting Bureau, Tanners' Council, New York

(From "American Industries")

SINCE the beginning of the great war, which has just been brought to a conclusion, the entire industrial world has been awakened to the necessity of increased efficiency in all directions.

Probably not least among these has been the interest and impetus which has been given to the establishment of real practical systems of cost finding.

During the war, it was the writer's privilege to represent the Government in many investigations, attempting to ascertain the cost of producing various commodities. It was apparent that in many cases little attention had been given this subject by manufacturers, with a consequent inability to assist the administration in a time of utmost need, without first having an extensive and costly audit made. For this reason the Government has since done a great deal to encourage and assist manufacturers in establishing accurate and correct cost accounting methods.

In times past, cost finding has been greatly feared, and probably justly so, for it is a fact that in many instances efficiency experts have evolved systems so intricate and detailed that the operation of the same required so much "red tape" as to make it not only burdensome but entirely worthless. On the other hand, a cost system by which merely an average cost of production or an approximate cost is arrived at, is likewise inadequate.

What Cost Data Should Show

A cost finding system should, in all cases, be so constructed that it is in absolute control with the general accounts of the company, otherwise the accuracy of the costs are questionable. It might then be asked, "What value are the figures if they are only accurate, what do they mean, what information do they give to those who wish to use them?" Cost data should show an executive not only that he is making or losing money, but the articles on which, or the department in which, he is making a profit or showing a loss. Accurate costs therefore are fundamentally and essentially necessary to all manufacturing efficiency.

One value therefore, of cost accounting is to secure the final and complete cost of any given article of production, which can safely be used as a basis for selling the same, with a definite knowledge that a profit will be realized. There should, however, be a further purpose, to give those in authority a comprehensive idea of the inner operations, where improvements should be made, where waste and excess can be curtailed. Unless the exact cost of each department is known, the department which needs special attention in order to reduce expenses by waste of materials, inefficient help, careless supervision or waste in buying will not be known. It is true, however, that the more the detail can be eliminated and the fewer reports necessary, the more effective the operation of the system, provided that the reports do show the busy executive at a glance all the information necessary in which he is interested and which he needs in order to increase the efficiency of his organization, which naturally will increase his profits. Such a cost system, one which has the tendency of increasing profits, is never and should never be feared.

It has often been said by manufacturers, that their business is unique or different and while cost systems are all right they could not be adapted to their business. It makes no difference what the character of the business is, the cost of production can be secured; however, it is unquestionably true that some cases are more difficult than others.

Installation an Investment

The expense of installing such a system and the continued operation of the same has also been an objection. This expense is but a fractional part of the actual saving which a system should develop, and I have heard it said after an installation has been made, that "they would never again be without it." The installation really becomes an actual investment which of itself returns more than any other investment of like amount, and usually appreciates with age. It is also often stated, by conscientious objectors, that they know what their costs are, so why install expensive methods to obtain the same. It will be found in most cases of that kind, that their costs are based on estimates made by foremen or superintendents. Estimates are invariably treacherous and unsafe, especially during a period when labor and materials fluctuate as greatly as they have been. Cost being the sum total of all labor, material and overhead expense necessary to produce a given article, it is a definite amount and indicates the exact point between profit and loss. You cannot, therefore, change a cost by merely changing figures. It is first necessary to go to the source and correct the conditions which made it before the cost changes.

We are at the present time in a period of high prices, when the margins between cost and selling price are large enough, so that from a fraction of a cent, to even a dollar, in some cases does not mean much, but when this margin again grows closer, and both domestic and foreign competition becomes keener, the closest analysis and most efficient management will be necessary to reduce the cost to the small fraction of a cent. And how are you going to do this unless you know where and how?

Data Should be Accurate

The operation of a cost system may virtually be termed a science, which is governed by fixed laws and rules, not only for securing the data, but for using it. To sum it all up, the data secured should be accurate and connected with the general books; it should be made adaptable to all local conditions and simple, consistent with the information required

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without being burdensome. To install such cost accounting methods requires time and a thorough analysis and study of the conditions, and cannot be taken theoretically from any published volume on the subject.

What is cost? As defined, it is the equivalent paid for anything—expenditure, outlay, etc. The cost to manufacture, therefore, is composed of the three distinct elements, labor, materials and overhead or burden expense. The problem, of course, is to ascertain the amount of each of these elements applicable to the various articles produced. It is essential to secure the cost of each element separately so that in cases of necessity the executive can see just where any trouble may lie and correct it immediately.

Averaging of costs will not accomplish the results in obtaining cost of production, especially not, where a number of different articles are produced. While such an average, taken at the end of any period might show the profit or loss on the entire business during that period, yet it may be true that during the period there may have been some articles on which there was actually a loss, and these losses were carried by the articles which produced profits. But there would be no information to show which was which. Furthermore, if it became necessary to quote a very close price on a large contract the average cost would form merely a guess, whereas an actual cost would give exact data whereon any quotation made would realize the exact profit anticipated. I have often heard it said, "We sell only at the market price and cannot get any more than the market, why go to the trouble of getting costs." It is unquestionably true that if an actual cost, which is above the market at which the manufacturer is forced to sell, is continually before him, sooner or later he will either use every effort to reduce his cost or stop manufacturing that article..

Distribution of Overhead

The distribution of the overhead or burden expense is a widely discussed subject. Included therein, there must be all indirect charges, fixed charges, maintenance and miscellaneous expense, other than labor and materials. To distribute this properly, requires study and analysis of conditions. The method used should be illustrative, as far as possible, of the actual expense incident to the production of any given article manufactured. General average percentages should be avoided.

The reports or data accumulated should be concise and not voluminous, in fact a graphic chart showing the actual rising or falling of any element of cost of any given article or department, frequently shows more conclusively the actual conditions than would masses of figures.

As for the leather industry, the officers of the Tanners' Council of the United States of America, the national association of the tanners in this country, immediately at the close of the war, appreciated the benefits which would result in not only figuring costs accurately, but figuring them in a uniform way as far as possible throughout the industry.

With this purpose in mind they created the Cost Accounting Bureau of the Tanners' Council, to act in a constructive as well as consulting capacity for the industry.

The tanning industry is divided principally into eleven major groups, viz., sole and belting; harness; bag and strap; side, calf and kip upper, Eastern and Western divisions; upholstery; glazed kid; sheep and lamb; patent, glove and general utilities leathers. Each group has been organized into groups of accountants who are employed by the various companies making the respective kinds of leather. Periodically, meetings are held in Chicago, New York and Boston, as well as Philadelphia, with the head of the bureau, and the best methods are recommended and thoroughly discussed, with

an ultimate view of establishing, in detail, one method which could be adopted as the uniform method in each group. Thus far, many fundamentals have been decided upon, but naturally, a work such as this is of such great magnitude that it requires much time and study in which to meet and overcome all of the obstacles, many of which are met in all cost accounting work. There are, however, probably more complex situations arising, in obtaining accurate cost of tanning than in most other lines of manufacture. The membership has been most co-operative in this work and are practically unanimous in the thought that once the uniformity is established much good will result.

Much Better Competition

It is obvious that uniformity in the method of arriving at cost of tanning leather or uniformity in any other industry, would undoubtedly result in much better competition, because each manufacturer will at all times know that each and every competitor will be figuring his costs on the same basis and be including therein every item which is really a part thereof. It remains then only for each one to reduce his expense in his own plant to the minimum. By such methods the greatest efficiency is instituted in the entire plant, materials used, which are often very expensive, are no longer wasted and the employees throughout are educated to better and more economical methods and practices. Such practice will unquestionably sooner or later place any industry on a better and more stable basis.

There are, of course, many other detail phases, too numerous to mention here, which will be and should be analyzed and studied, such as the taking of proper inventories, especially of stock in process, the operation of storerooms, the depreciation of plant and equipment, etc., all of which form an important part in the cost of production.

Paying Wages Through Banks

Money is Deposited to Credit of the Worker Who May Pay it Out by Check

Not long ago the manager of a big industrial plant in England saw several hundred of his employees crowded around the paymaster's window, drawing their wages. It struck him that this was not only a waste of their time, but that it was an undignified scramble for the money they had earned. He would not have liked to get his own salary that way. It seemed as though a more modern method of paying wages might be contrived.

Going back to his office, he worked out a plan that combines dignity, time saving and thrift. This has been approved by the company, and is now optional with employees, many of whom are taking advantage of it.

Instead of asking employees to congregate around the pay window and wait their turn, they may open a checking account at any bank selected by themselves, and the company deposits wages each week to the employee's credit, in his own bank. The employee then pays household bills by check, draws out whatever cash is needed, and leaves the balance in the bank as savings. The company makes a further contribution to his account, representing about five per cent. interest, on all the money which he is able to save.

Before the war, a dollar belonging to an employee and a dollar belonging to the employer were seldom on speaking

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Laurentide Profits Increase

Figures for Last Year's Business Show that Record Profits Were Earned

At the annual meeting of the Laurentide Company, held in Montreal on September 2, a statement was presented showing that for the year ended June 30 last, after all deductions had been made, net profits of $1,823,656 were earned, an increase of $119,001 over 1918. Earnings were equivalent to 19 per cent. on the outstanding capital shares. The net revenue of the year totalled $2,955,978, against $2,593,834 in the previous twelve months, and $2,220,660 in 1917, the moderately lower gain in profits being due to more generous allowances for depreciation and the deduction from the year's earnings of $175,554 as a reserve for the depletion of the company's timber limits, which, in the statement under review, appears in the working account, instead of in the balance sheet, as heretofore. The allowance for depreciation for buildings and plant was made with an even more generous hand than in the past, $329,841 being written off in the 1919 exhibit, against $271,883 in 1918 and $116,670 in 1917.

After the payment of dividends and the bonus declared several months ago, which aggregated $1,392,000 in the 1918-19 period, compared with $960,000 in 1917-18 and $864,000 in 1916-17, there remained a balance of $431,656 to carry into the current year's accounts, being total surplus of $2,857,204, equal to over 28 per cent. of the combined capital and funded obligations of the pulp and paper enterprise. The disclosing of a strong financial position as regards working capital is little in the way of a novelty in an annual statement of the Laurentide Company, but the 1919 exhibit is notable for an even more comfortable showing in this respect, working capital as at June 30 last standing at $5,355,670, compared with $4,679,669 last year. Current assets of $7,238,086 are nearly $1,000,000 in excess of those of 1918, although current liabilities also show an increase of almost $266,000. The latter is more than accounted for, however, in the increased dividend and initial bonus paid shortly after the end of the company's fiscal year, but shown in the 1919 statement.

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Canadian Locomotive Company

Profits for the Past Year Were the Largest in the History of The Company

The report presented to the annual meeting of the Canadian Locomotive Company, on September 17, recorded profits for the year of $892,976, an increase of about $215,000 over 1917-18, and the largest in the history of the company. This fact is especially gratifying because for the last two months of the year's operations, the plant at Kingston was experiencing a strike. Of the total profits, $44,292 was obtained from interest on investments. After meeting all charges and providing for depreciation and replacement, there remained a balance of $427,377, which added to the previous balance, brings the profit and loss account up to $1,348,800.

Cockshutt Plow Co.

Further Marked Increases in Profits for Past Year Shown by the Company

Profits of $571,586 for the year ended June 30 last, are reported by the Cockshutt Plow Co., Limited, of Brantford. These are the largest profits since 1913, when $753,298 was earned. Referring to the company's present position, Col. Harry Cockshutt, the president, says: "The position of the company has materially improved. We have been able to pay four quarterly dividends of one per cent. on the preference capital and we expect to continue the dividends until conditions become more settled. We further hope to declare at an early date a dividend of 3½ per cent. on account of deferred dividends on the preferred stock."



Baldwin's Limited

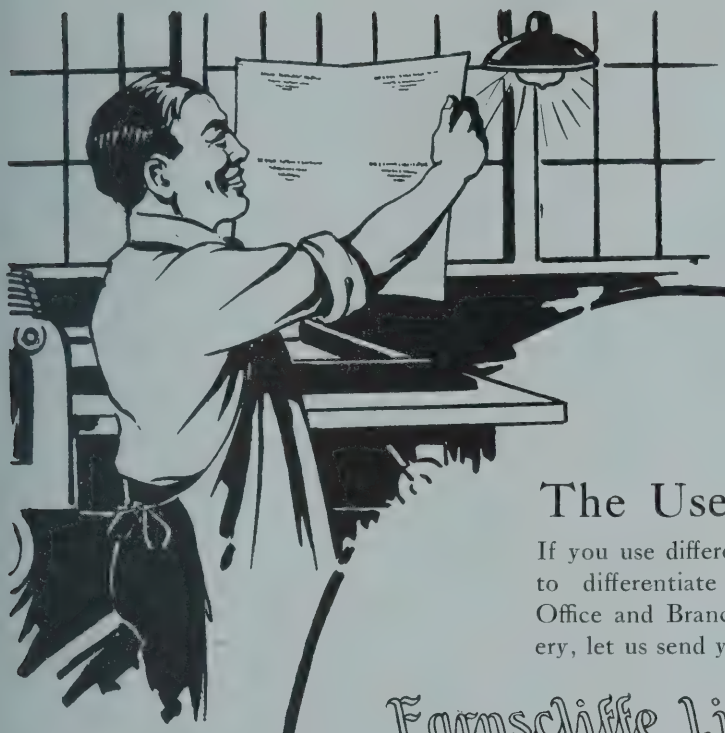
Capital to be Increased in Order to Carry Out Industrial Developments in Canada

At the annual meeting of Baldwin's, Limited, recently held in Birmingham, England, a resolution was moved increasing the capital of the company by the creation of 3,000,000 "B" preference shares of £1 each. A portion of the money will be used for the development of property acquired in Canada. The company enjoys trade in the Dominion which requires further enterprise if it is to be maintained and increased. For this reason the directors desire to utilize their special knowledge and facilities in order that they may actually manufacture on a considerable scale in Canada itself. Baldwin's, Limited, have purchased the plant of British Forgings, Limited, on Ashbridge's Bay, Toronto.

Universal Tool Steel Co.

Annual Report for the Year 1918 Shows a Net Revenue of $278,382

The Universal Tool Steel Company, of which Sir Donald Mann is president, has issued its report for the year ending December 31, 1918. Gross profits on shell-making amounted to $540,876, while on the manufacture of a bolt, which was taken up after munition business ceased, a loss was incurred of $30,146. The net income was $278,382, out of which there was paid a dividend of 2 per cent. on the common stock and 6 per cent. on the preferred.





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Why Suggestion Systems So Frequently Fail

In most cases suggestion systems are apparently failures, but employers, who have given the subject a more careful trial and have thoroughly studied methods that enable them to use to best advantage the ideas which employees turn in, think differently. In the following interesting article some of the essentials necessary to make a suggestion system successful are outlined and experiences recorded.

By NEIL M. CLARK

(Reprinted from "System")

IDEAS are the good red blood of business, provided, of course, they are the right kind of ideas . . . . those or example, which have to do with better machines, methods, r policies. Ideas evolve in the minds of human beings by ome process usually difficult to follow; and the concern of nanagement with them lies in the fact that probably the ypical employee has about as many ideas, taking one with nother, as the typical employer. Many of these ideas of mployees are, in the nature of things, bound to relate to the mployer and the work. It rests largely with the manage- nent whether this potentially tremendous brain force, which an never be merely neutral in its effects, is directed into onstructive or destructive business channels.

Ideas from Unexpected Sources

The owner of a string of department stores tells that the est business idea he ever got came from a delivery boy, ged fourteen. That is one of the peculiarities of ideas. No ne can safely prophesy just where they are going to turn p. It is clearly the part of wisdom, therefore, to provide or their cordial consideration when even they do happen to ut their heads above the surface.

That is merely good business. But there is another side o the matter. Management needs to provide some kind of utlet for the dark ideas and gloomy thoughts that tend to rew and stew in the mind of the man who does not let the unlight of intelligent intellectual companionship into his oul. Such ideas and thoughts, if they do not find ultimate xpression in hostile acts against the management, are retty sure in the majority of cases to "sour a man" on his ork and prevent him from being—in the fine sense of the ord, and probably in any sense—an efficient producer.

An interesting story could be woven around the trials of ne business suggestion box. Great numbers of employers, ell aware of the facts enumerated, have sought to garner the harvest of ideas. The history of one of these attempts ill serve to indicate the fate of many—I think perhaps a ajority.

The campaign for suggestions was started in this concern ith the roll of drums, as it were. Each employee received notice explaining the company's desire to receive ideas, nd carefully defining the nature of suggestions to be sub- itted. Cash prizes of $5, $2.50, $1, and honorable mention, ere promised the winners in the contest, which ran for ur weeks. At the end of that period a new contest started. he employees were given special forms on which to write out their suggestions, and they were told to deposit them in a locked box specially devised for the purpose.

So far, good!

Then the employees began to respond. It turned out that nearly everybody had at least one suggestion which he thought should reach the manager's intelligence . . . . . some plan which he supposed might save the company money, simplify procedure, or increase profits. When the first contest period closed, the committee in charge of awards had an abundance of ideas from which to select winners. They made their decisions, and on the appointed day called all the workers together in a large hall, where songs were sung, speeches made, and finally, amidst considerable interest, the prizes were handed to the winners.

This programme was repeated through three or four contest periods. But as the day approached for each new award of prizes, the committee found that the number of suggestions of any value dwindled so rapidly that they were not worth the bother and time spent in getting them. The "suggestion system" silently passed into oblivion.

Now, what was wrong? Who was to blame? Were the employees' minds such arid wastes that no further ideas could be coaxed to grow in them? Or, was the management somehow at fault?

In this instance, as in many similar cases, I believe the blame rested wholly with the management. In the first place, the general manager was not seriously concerned about getting ideas from the workers that he could *use*. He was, in the last analysis, fairly confident that he and the executives associated with him, were competent to run the business all right. The suggestion system he considered as more or less of a game, which might amuse the employees.

Difficult to Keep up Interest

As a result of this attitude, no serious effort was made to apply the suggestions, even though some of them gave indications of constructive thought on the part of employees. Not many workers can be kept continuously interested in the moderately remote chance of winning a rather slender prize, particularly when the purpose of the contest is so obviously farcical.

Many employers can relate an experience closely resembling this. And the opinion of most of them seems to be that the results do not warrant the effort and money spent in getting suggestions. Employers who have given the subject a more careful trial, and have thoroughly studied

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methods that enable them to use to best advantage the ideas which employees turn in, think differently. From the experience of these successful users of suggestion plans, it seems fairly clear that it is essential, if a suggestion system is to be successful, to demonstrate to employees—

1. The open-mindedness of the management, and the serious desire for the ideas of employees;

2. The willingness to consider thoroughly the ideas that are offered, no matter whether they seem good or bad at first glance; and the intention in any case to let the employee know the decision and the reason for it;

3. The desire to reward fairly the man who makes the suggestion, if it has any value.

The best proof that the management wants suggestions is of course to use those it gets, when they are worth using. When that is done, the news of it spreads rapidly through an organization. It gives the worker a genuine feeling of pride to point to a machine or method and say, "That's my idea!" And if he is rewarded fairly, it is an incentive to others to turn in their suggestions also. These may seem to be little things. But good management after all is the sum of many little things, which are handled in the right way.

Merely to ask employees for suggestions may have the same effect as asking a small boy to define the moon. He has no definition. So far as he is aware, it is just a moon! A hint as to the kind of suggestions wanted often proves valuable in helping employees to concentrate on the kind of problem where they are most likely to be of help. A New York company which has been unusually successful in developing the habit of suggestions, goes to considerable pains to let its employees know what a good suggestion really is. When, for example, a worker suggested an improved part for a machine, which was adopted, the manager had photographs of both the old and new plan made and mounted on cardboard, with a full explanation of the improvement. Accompanying it was a brief text explaining that his idea exemplified the kind of suggestions which the management especially wished to encourage.

The Kind of Suggestion Wanted

In other words, the employee was not asked for "suggestions"—a large word, the exact meaning of which he might fail to comprehend; but he was shown an example of a suggestion and told, "Maybe there's something about your work on which you can suggest improvements in somewhat the same way." Unless there is concrete, constructive direction of the workers' thought, some of them are likely to recommend, as one man did, "make the truckers load faster." He happened to be a machine tender with plenty of opportunity to observe the foibles of truckers! His recommendation was not utterly devoid of value, for it suggested a direction for possible investigation; but it did fall short in all the elements that make a suggestion really valuable to the management.

In any plant where the manager has succeeded in convincing the workers that he welcomes suggestions, and treats them fairly, there is usually no lack of them. And here enters a danger: namely, the risk of slighting suggestions, or turning them down without letting the originators know the real reasons for doing so. This is also an opportunity. If a man has a suggestion rejected, and he knows why it is rejected, he is in a better position than before to avoid further bad suggestions.

The danger is delicate and common. In business two minds or two groups of minds are constantly meeting, one of which says "let's do *this*," while the other insists, "let's do *that!*" Given equal force of character, lung power, and

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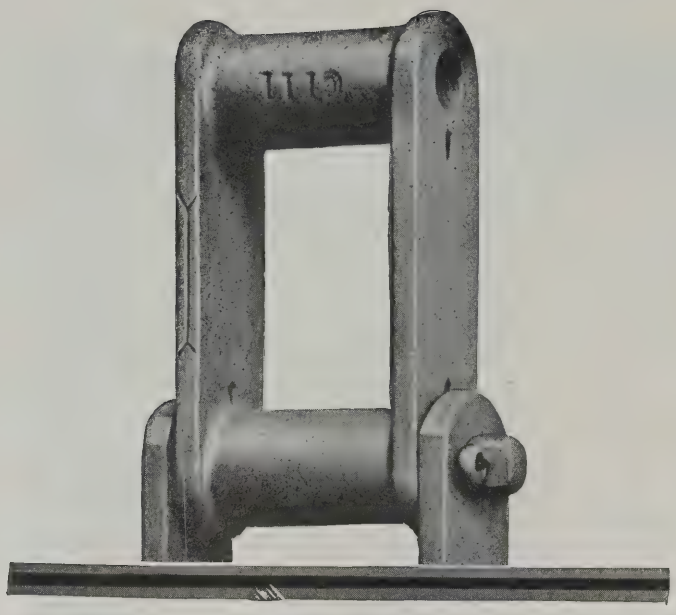
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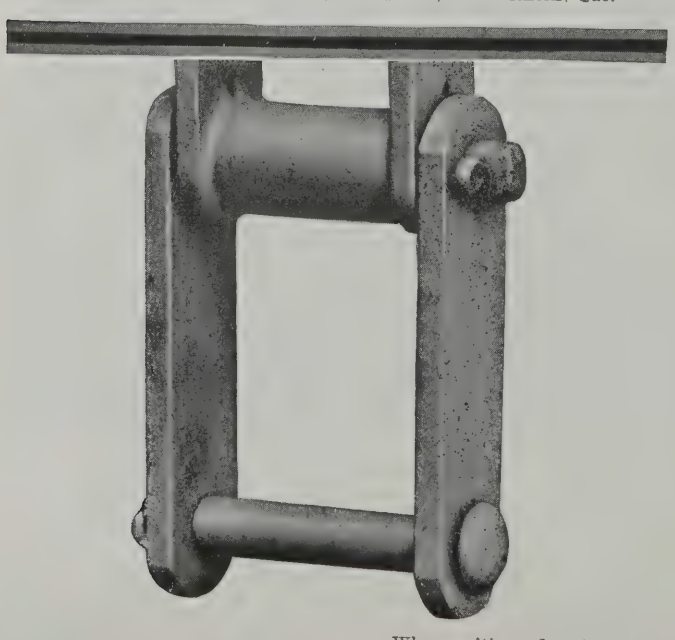
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logic, the two sides quickly reach an *impasse*. It is usually true, however, and this is commonly the case as between the management and the men, that one side has a subtle weapon, reserved for finally putting an end to the discussion. That weapon is authority.

The boss "has the say." In the last analysis he depends on his judgment for making his decision "yes" or "no"; and always, when he says "no," he runs the risk of seeming arbitrary, thereby arousing resentment in the mind of the employee, or at least destroying some of his initiative.

When "No" is Necessary

The best way to say "no," as a rule, is to give all the reasons with complete frankness. During the hottest period of summer, a year ago, a battery of new machines for use on some Government work was being installed in an Ohio factory. The manufacturers of the machines had been unable to develop a self-feed attachment. It was imperative to deliver the product to the Government. The needed capacity could practically be reached by hand feeding; but this required an operative on each machine, and men were scarce.

One employee, not a mechanic by trade, but a man of unusual ability in that direction, was positive he could develop an automatic feed, and he set himself to the task of doing so, working incessantly through the days and far into the hot nights. Finally, late one evening the manager was called to the factory by telephone to see a practical demonstration of the device. It functioned, and it functioned well; but the manager could see where there was a chance that the device might frequently throw the machines out of working order. The loss of time from this cause, he feared, might result in a smaller weekly production from each machine than through the method of hand feeding. Delivery dates were imperative. Since they could just about be met by the hand feeding process, the manager, after thoroughly considering the advantages and disadvantages of the two methods, felt compelled to reject the feeding device.

It was a crushing blow to the man, whose creative genius had developed a novel and workable attachment. Money alone could not overcome his disappointment. The case naturally had to be handled with a little more than usual care. Says the manager:

"I did not, however, find it difficult to convince our employee that in demonstrating his ability along lines which were bound to be useful to us in the future, he had in reality accomplished a great deal for himself, and that the time and energy he had thrown into this thing had not by any means been wasted."

The Eastman Kodak Company uses an analysis sheet by means of which those responsible for looking into the suggestions of workers measure the cost of changes against the savings they may effect. The worker is taken into the confidence of the management, and if an idea cannot be used with practical results, the reasons as they are shown by the analysis sheet are fully explained to him. Mr. A. Stuber, of this company, says of the plan:

Should be Handled Diplomatically

"The answer to the suggestion which is not approved can, if not worded properly, discourage the suggester so that no further suggestions will be received from him. Or, if proper advertising thought is given to the answer, he can be stimulated again to offer another suggestion. I believe that this point is one of the main factors in the success or failure of a suggestion system.

"There are several other big points in the suggestion system which up to the present time have been overlooked, and


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which I believe are of considerable benefit to the management. One of these which I am experimenting with and watching very closely, is using the suggestion system as a means of improving the so-called human relation in industry.

"I find that the average employee when in my office for the purpose of discussing one of his suggestions, is in a better frame of mind to tell me his troubles and the troubles which other employees are experiencing, than when brought to my office for any other purpose. By tactful questioning I am able to get more information on actual conditions in the shop than at any other time. I am also able to take some of those grievances which he believes very serious, and show him that he is wrong.

"At this time, if properly handled, the management can establish a real get-together spirit with these employees, and mutual understanding and trust can be developed, which is of considerable benefit to both the employee and the management."

The reward that the worker receives for a good suggestion should justly have some relation to its dollars-and-cents value to the company. A man who turns in an idea, does something that can hardly be recompensed in his regular wage. If his idea is for machinery, or equipment that will save the company perhaps hundreds or even thousands of dollars—there have been such suggestions!—he can hardly, in the interest of justice, be fairly rewarded by the mere payment of a hard-and-fast sum, such as $5 or $10, or even $25 or $50.

His reward may not be directly in money at all. It may be wisest to give him a chance at a bigger job, or the opportunity and facilities to pursue a course of study to fit himself for larger tasks. One employer I know of, rewarding an employee who had made an especially valuable suggestion, handed him a cheque for a little better than a thousand dollars, to clear the mortgage on his home!

The co-operation that the company is forced to give in perfecting an idea may also enter as an element into the consideration of the just reward. Often a man will have in his head the germ of an idea, which he has neither the skill nor the facilities to perfect. When other heads combine with his to attain the final result, he can readily be made to realize that his reward is bound not to be as great as if, with his own resources, he developed the idea to its final shape.

Put a Padlock on Suggestion Box

Men are inclined to be jealous of their idea. This is natural. A brief experience in a few plants usually teaches a worker how easy it may be for one man—a foreman or subexecutive, perhaps, or even those in higher authority—to appropriate his thought, and seek to take the full credit. That is why it is important, if a suggestion plan is to succeed, to make provision so that every man's suggestion will reach those fully qualified and willing to place full credit wherever credit may be due.

Most suggestion boxes need a padlock with a key in the hands of the man designated as the representative of the management to consider all of the suggestions.

So much for encouraging the workers to submit their constructive ideas. It is safe to say that when the minds of workers are turned in the direction of building up, there is not much room left for those ideas which tend to tear down and destroy . . . . ideas that often lie hidden, making the workers disgruntled and gloomy of temperament, inefficient of hand, and fertile soil for seeds of unrest, dissatisfaction, or industrial strife. Such ideas are seldom expressed except in snarls.

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Where expenditures for betterments, additions, etc., have been charged to expense, or where excessive depreciations have been written off and have not been credited to specific reserves.

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RECONSTRUCTION NEEDS OF FRANCE

Of all the belligerent nations on the side of the Allies, France suffered most. In loss of population, in drain on financial resources, in decline of export trade and in destruction of material wealth and productive agencies, the burdens imposed by the war on France far exceeded those of any of her Allies.

By C. W. A. Veditz, Ph.D.
(From the "American Review of Reviews.")

The first problem that France has to meet after the signing of peace, next to the demobilization of her troops, will of course be the reconstruction and re-equipment of her devastated regions—the task of putting her productive machinery into normal working order. The mere replacing of damaged and destroyed plants, the rebuilding of wrecked dwellings, the resuming of farming operations upon the shell-torn soil, will call for large expenditures of money, for a generous supply of labor both skilled and unskilled, for materials of all sorts, and for a high order of organizing genius and of financial ingenuity.

It must not be overlooked that France has in most respects been the greatest sufferer from the war. In her loss of population, in the drain upon her financial resources, in the decline of her export trade, and in the wholesale and wanton destruction, by the enemy, of her material wealth and her productive agencies, the burdens which over four years of war have imposed upon France far exceed those which any of her allies has been called upon to bear.

The Human Wastage of the War

Of the great European nations France is the only one which for years has had a stationary population (approximately forty million) and her shortage of labor has for years been such that hundreds of thousands of foreign workers have been attracted across her frontiers by the lure of higher wages. In direct loss of human material the war has cost France about two million men. Figures given by the Under Secretary for War, as of November 1st, 1918, are as follows:

	Officers.	Men.
Killed	31,300	1,010,000
Disappeared	3,000	311,000
Prisoners living in enemy countries or in Switzerland	8,300	438,000
Now receiving pensions		76,000
Réformés No. 1 (incapacitated)		113,000
Réformés No. 2 (released from service)		2,374,000
Temporary réformés (temporarily unfit for service		131,000

It is certain that the total number of killed, and of those who have been sent home with wounds or diseases that make them partly or wholly unfit for productive services, and transform them from active to passive factors in the economic life of the nation, will not fall short of two million male adults. Indeed, from a purely economic point of view the disabled and incapacitated soldiers and sailors represent a liability rather than an asset. The military pension bill now before the French national legislature involves expenditures so gigantic that one deputy, in discussing the probable effects of a proposed slight increase in the rate of allowances, admitted that the change would make a difference, in the annual total payments, of "several hundred million francs." The former Minister of Finances, Ribot, in a remarkable speech in the French Senate on December 17th, 1918, estimated that the pensions that would be paid to the sick and disabled, the widows and orphans of the war, would amount to two and a half billion francs, or about $500,000,000 per annum.



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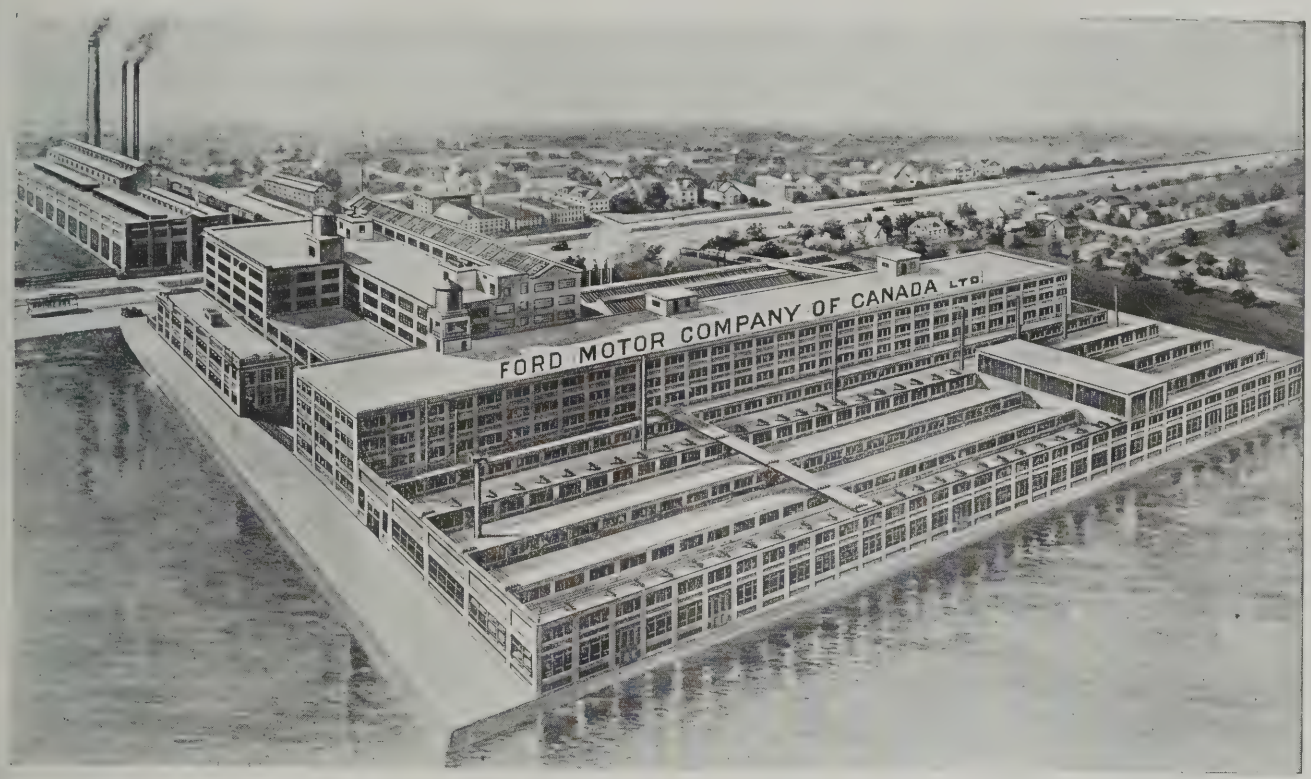
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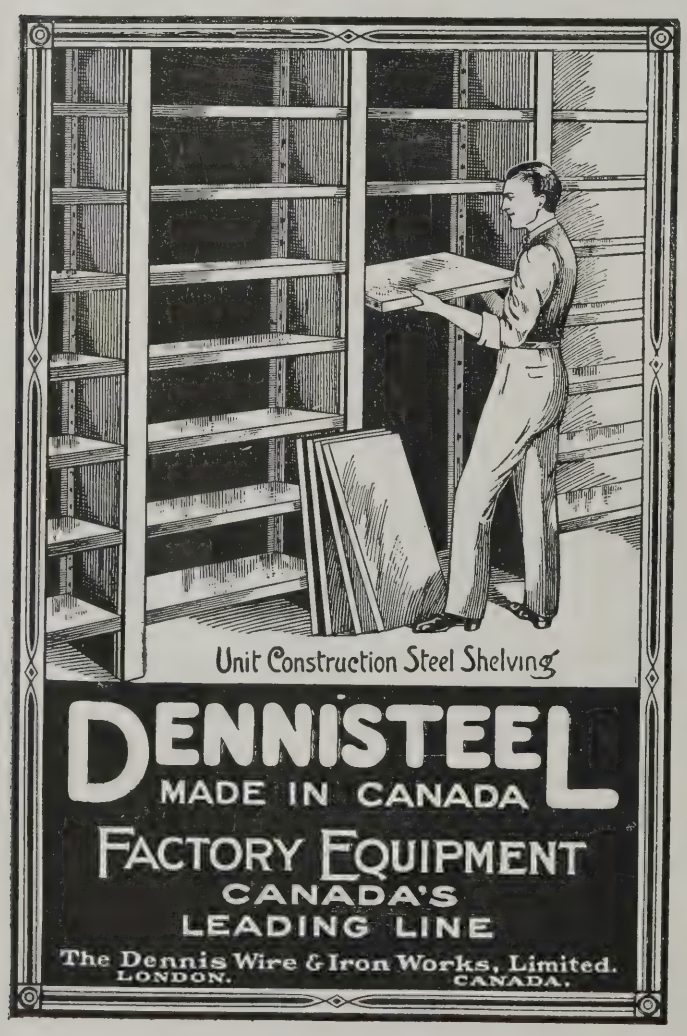
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Another factor in French population that should not be overlooked, and to which I have seen no reference in the American press, consists in the startling decline in the French birth-rate, which even in normal times is barely sufficient to maintain the total population at a level of about forty millions. In the 77 "departments" of France that were not invaded—that is to say, excluding the war-swept regions—the birth-rate fell off, from August, 1914, to the end of the year 1917, by 883,160. Hence it may be said without exaggeration that, in addition to the two million adult males killed, or incapacitated beyond hope of redemption, at least one million children (more if we take into account the figures for 1918, and the inevitable subsequent effects of the lower birth-rate), who would have been born to France in normal times, failed to see the light of day. For France this is a matter of literally vital importance, her birth-rate having fallen from 19 per thousand in 1911-1913, to 10 per thousand in 1915-1916, whereas the birth-rates of England, Holland, Denmark, Spain vary from 21 to 31 per thousand. It was the shortage of man-power in France that led to the introduction before the war of the three-year compulsory military service instead of the two-year service



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For Germany, with her population of 67,000,000 in 1914, increasing at the rate of about a million a year, had no difficulty in maintaining a considerably larger standing army.

As for the financial cost of the war through government expenditures, the national debt of France amounts to approximately 170 billion francs, instead of the 32 billion francs at the outbreak of the war (over 30 billion dollars instead of 6 billion dollars). Ribot estimates that the annual expenditures of the government, together with the interest charges on the debt, will reach a grand total of about 18 billion francs, or $3,500,000,000. This amounts to approximately 6 per cent. of the national wealth, which is variously estimated by the leading authorities at from 250 to 300 billion francs. The present sources of public revenue yield about seven billion francs per annum ($1,400,000,000).

Trade Losses

Quite distinct and apart from the heavy obligations which the increased public debt imposes on France, is the very unfavorable "balance of trade" during the war. Of all the belligerent nations on the side of the allies, France has probably had least regard for the maintenance of her export trade, and during the long period in which she sold less goods than usual to foreign countries, because her productive forces were diverted from their usual channels and turned to the tasks of war, the value of all goods imported into France, from the first of August, 1914, to the close of the war, exceeded the value of all exports from France by more than 40 billion francs (approximately $8,000,000,000). This so-called "unfavorable balance of trade" must obviously be offset sooner or later by the transfer of a corresponding economic value; that is to say, France will either have to pay this balance in gold, the only international money, or in goods of corresponding value. A third possible solution consists in the acceptance, by Americans and other creditors of France, of French securities; that is to say, by large-scale American investments in France.

Health of the Invaded Districts

In making an inventory of the consequences of war in France, it should also be noted that until a few months preceding the armistice the enemy still controlled, in whole or in part, ten of the eighty-odd "departments" or administrative sub-divisions of France, including the richest and industrially most important regions. The invaded Northern and Eastern departments furnished in normal times one-fourth of the government revenues. They contained one-fifth of the buildings and of the industrial establishments of the nation, outside of Paris. The Nord and the Pas-de-Calais departments alone produced 27 per cent. of the national wheat crop. Five of the invaded departments furnished 80 per cent. of the beet alcohol distilled in France. Of the 206 manufactories of beet sugar operating in 1913, 142 were located in four of the invaded departments—68 per cent. of the total.

The coal basins of Lens, Douai, Anzin, together with the other coal mines of this highly industrialized region furnished 68 per cent. of the coal mined in all of France. The famous iron ore basin of Briey-Longwy, of which the Germans acquired control early in the war, and the exploitation of which (many authorities contend) enabled Germany to carry on the war as long as she did, yielded 90 per cent. of the French iron ore. The metallurgical establishments of the East and of Hainault were responsible for 70 per cent. of the steel products and 80 per cent. of the pig iron made in France. The steam engines in the industrial plants of this section represented a total horse-power of 1,236,500, in the nation's total of 3,235,200, or 39 per cent. In France's total of 7,525,000 cotton spindles, 4,475,000 were located in these regions. Of spindles running on wool, 64 per cent. were either in these

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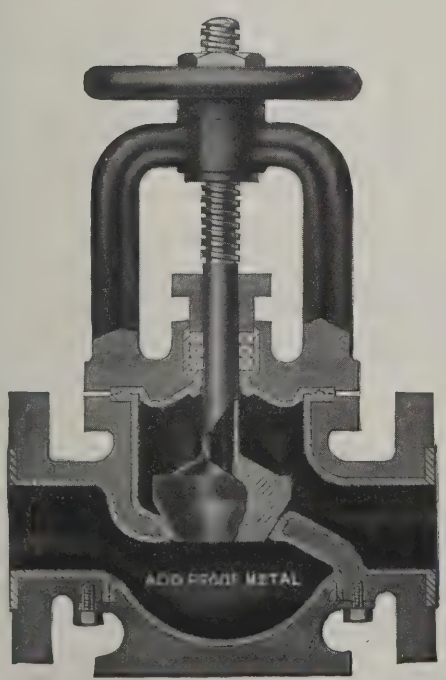
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sections held by the enemy, or so near the firing lines that they could not safely be operated.

From all of these regions the Germans have of course recently withdrawn in conformity with the terms of the armistice, and it has thus become possible for the French authorities to appraise, at least approximately, the amount and character of the damage done by the invaders during their unwelcome sojourn.

Some places were so entirely destroyed that it is impossible to fix even the sites of what had previously been prosperous and peaceful towns—like Bouchavesnes and Sailly-Saillisel. Of 841 communes in the Aisne department, says Senator Touron, barely 40 have been spared from German occupation, and whole cantons have been literally wiped out of existence. Elsewhere the damage is confined to a small part of the town or to the larger and more conspicuous edifices. But even in the localities not completely razed, the Germans stripped mills and workshops of their equipment, and the farms of their buildings, their cattle, and their implements of production. At Roye, for example, where the actual fighting caused no irreparable damage, they burned the sugar mills, removed the bronze, zinc, lead, copper, and other metallic parts of the machinery, and smashed into fragments the parts that were left. Some localities suffered the effects of repeated and violent bombardments; others were deliberately set on fire, from house to house, as in the case of Gerbévillers, in Lorraine.

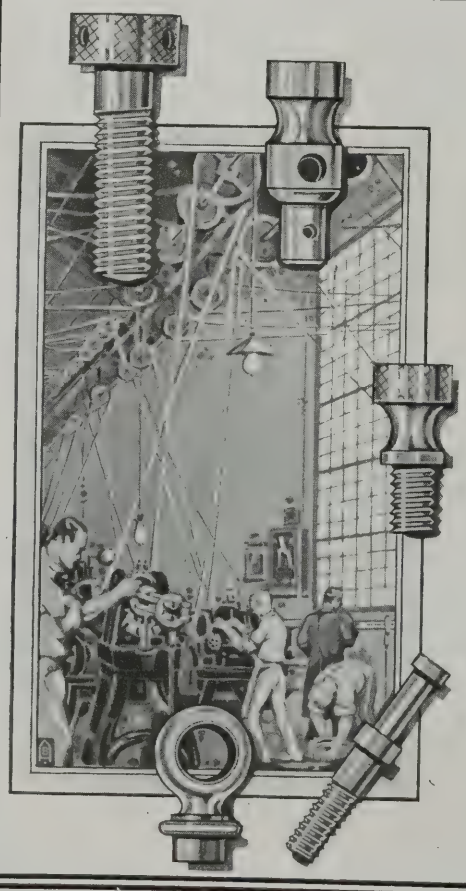
Reduction of the Coal Supply

The condition in which the coal mines have been left by the Germans is such that after extensive repairs the output can scarcely be expected to exceed half that of the normal output of this region; whence it is evident that France's need to import coal from abroad, will be greater after the war, by at least ten million tons than it was before the war. The transfer of the coal mines of the Sarre region, while it will increase considerably the national output of coal, will do this only approximately to the extent of supplying the coal required by the Sarre region itself.

The mining expert selected by the French Government to inspect and report upon the condition of the mines in the liberated regious—Lieutenant-Colonel Weiss—has declared that in some cases it will take five years to put the coal mines in full working order. The most important of them have been flooded; the workers' houses destroyed; the buildings and equipment, both overground and underground, either carried off or demolished; and the local means of transportation made unutilizable and irreparable. In the few mining localities in which the Germans permitted the workers' dwellings to stand, they stripped the dwellings of all furnishings and made them uninhabitable.

Destruction of Buildings

The 1,223 "liberated" communes covered by the investigation of May, 1917, had a total of 50,754 buildings completely destroyed, and 52,043 partly destroyed. The terms "partly destroyed" and "completely destroyed," as used by the French authorities in this inquiry, have apparently been strictly interpreted, and no account taken of buildings which have undergone no more serious damage than broken window-panes and shell-scratches on the outer walls. But whereas in many cases some of the stones, bricks and wood in damaged and destroyed structures can be used again for building purposes, there are localities in which even this is not possible. At Gerbévillers, the mayor, Dr. Camus, assured me that the greater part of the heaps of building stones lying over that martyred village, have been so calcined by the fires with which the Germans destroyed the place, that they are unfit for



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further use. In this small town with about two thousand inhabitants, Dr. Camus appraises the damage at fourteen million francs, basing the estimate on prices prevailing at the outbreak of the war.

The results of the investigation in May, 1917, have very recently been completed and brought up-to-date, at least in the form of approximations, by a committee of the Chamber of Deputies with M. Louis Dubois as chairman. According to the report of this committee there have been destroyed in all the devastated sections a total of approximately 250,000 edifices, and a somewhat larger number have been more or less seriously damaged. This figure thus represents a vast increase over the totals for May, 1917, and no small part of the increase is due to the fearful ravages wrought by the enemy in many of the larger cities near the firing line, or actually under German control. The figures for Arras, with a total of 4,907 edifices, show 1,311 in ruins, 1,227 partially destroyed, 1,499 damaged, and 870 fairly intact. Reims, with 14,000 edifices, has 12,000 destroyed, and of the other 2,000, damaged more or less seriously, only 500 are said to be readily reparable. At Lens, with 11,000 buildings, not one has remained intact, and few have even their outer walls standing; the sites of the local church and of the town hall are barely determinable.

In places like these, the mere task of removing the débris will require considerable time and labor. In contracts which were shown me for the cleaning up (*déblayage*) of Rheims, it is stipulated that navvies (*terrassiers*) shall be paid 2.50 francs per hour for ten hours per day, and in addition 10 francs per day as indemnity for the high cost of living. This makes a total daily wage of 35 francs, or approximately six to seven dollars a day.

Soil Made Useless for Agriculture

Apart from the damage to buildings (and it is interesting to note that Paris, as a consequence of air raids and the long distance guns, also had her share of the damage to buildings, inasmuch as 463 structures were destroyed or seriously damaged in the capital city), an important item is furnished by the literal destruction of the soil itself. In those sections in which fierce battles were carried on—as around Soissons, at the Chemin-des-Dames, on the plateau of Champagne, at Albert and at Bapaume—the trenches, zigzagging across the soil, the shelters and dugouts, the underground defences of re-inforced concrete, the shell craters—all these will make the utilization of the soil for farming purposes well-nigh inconceivable during many years to come. So thoroughly has the fertile upper soil been churned up, that no crop would grow. In the department of the Somme alone, there are 28,500 hectares (70,000 acres) in this condition; and in the devastated sections as a whole there are certainly not less than 100,000 hectares (247,000 acres) fit for nothing but possibly the planting of forests after the ground has been cleared, filled up and levelled. In a much larger area, which may possibly amount to three million acres, it will be necessary to clean up the soil, and to remove barbed-wire fences and similar obstacles, as well as the effects of four years of neglect. In many sections, the forests and orchards have been systematically burned, cut down, or otherwise destroyed by the Germans, notably in the Ardennes.

Industry Dismantled

Concerning industrial machinery and equipment in the devastated regions the report of the parliamentary committee gives interesting details. Many of the machines the Germans dismounted, labelled carefully, and transported to German plants engaged in the same branches of production, and there

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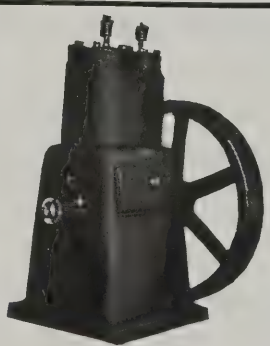
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put them up again for use, in the methodical fashion to which they are accustomed.

The textile industries furnish a good illustration of the German practises. In the woolen manufacturing region of Fourmies (which does not lie in the zone of actual warfare) the association of woolen manufacturers has reported on the condition of 74 plants in this section. These plants consist of 55 worsted spinning mills, with 735,500 spindles, of which 651,500, or 88 per cent., have been destroyed; of 13 weaving mills with 3,550 looms, of which all have been destroyed; three woolen spinning mills, in which 75 per cent. of the spindles have been destroyed; two woolen weaving mills, with 100 looms, all destroyed; a jute spinning mill with 1,800 spindles, all destroyed; and a jute weaving mill with 70 looms, likewise all destroyed. It is furthermore reported that the Germans, during their occupation or just before their withdrawal, had destroyed or removed in all a million spindles producing fine woolen and worsted yarns, and that for the French to replace these machines will require three years.

Financial Estimates

The parliamentary committee estimates the amount of destruction to dwellings, at present prices, as 20 billion francs, an estimate which coincides with those made by several national associations of builders and architects. It is furthermore estimated by the committee that the furniture, household effects, linen, bedding, and the like, which has been destroyed or which has disappeared in the invaded sections, should be valued at least at five billion francs.

These figures take no account of public buildings, churches, public monuments, and obviously no money value can be fixed for such edifices as the Cathedral of Reims or of Soissons. As for paintings, sculpture, and other works of art susceptible of removal, many of these were carried off, but most of them may be traced to their present locations; for the Germans went so far as to arrange expositions of these works of art and to issue catalogs of them. It may therefore be an easy matter to enforce their restitution.

To put the war-ridden soil into something like its original condition is estimated as requiring not less than ten billion francs, without regard for lost crops or for future declines in the yield of the land.

The damage to mines and to industrial establishments throughout the devastated regions is placed at 20 billion francs. This includes mines, metallurgical establishments of all sorts, textile mills, manufactures of machinery and tools, breweries, sugar factories, distilleries, and, in general, all industrial establishments.

Finally, fairly complete and reliable figures have been obtained concerning public works and utilities—railways, tram lines, canals, bridges, light and power plants, etc.—and these indicate damages amounting to not less than nine and one-half billion francs.

Thus the estimated amount of all the above damages gives a grand total of 64,500,000,000 francs.

Rebuilding from Local Materials

Of the total number of approximately half a million buildings destroyed or damaged, a very large number were devoted to agricultural purposes. The typical French devastated town is not the industrial centre like Lille, but the village centre of a farming region, containing the homes of the farmers and their families, and of the local tradesmen and mechanics. Their homes will for the most part be rebuilt of the same material as before—of the materials obtainable locally. The farm houses and barns, of *pisé*, stone, bricks, with but little wood, will require no far-fetched materials as a rule. Although wood will be scarce and dear, it is improbable that concrete



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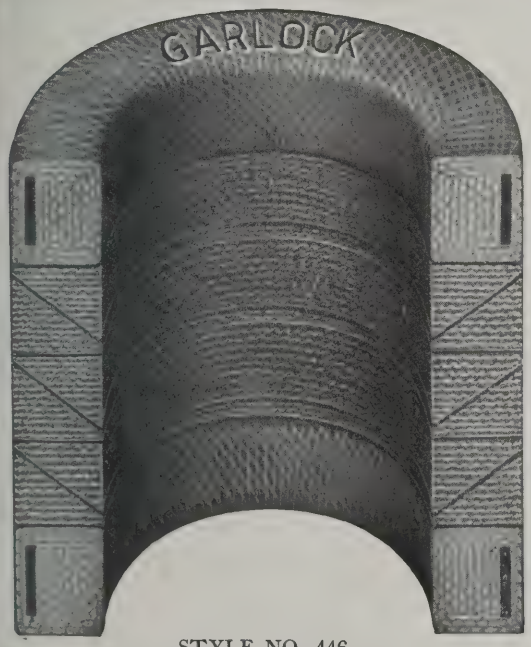
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and steel will be used for other buildings than for the larger factories and shops. There will probably be considerable demand for standardized wood-work (doors and windows), despite the general French aversion to them, because of the urgency of the need for homes and the lower cost of standardized wood-work.

Cement for building industrial establishments will admittedly be in great demand. Before the war the total output of cement in France was three million tons a year. During the war it fell to less than one-sixth of this quantity, and it will be no easy matter to again raise the output to the normal level, or to increase it sufficiently to meet the new requirements.

Structural iron and steel will figure largely only in the industrial edifices, and there will be a great demand for bars for re-inforcing concrete. Whereas there will in general be little importation of the heavier building material, there will certainly be a large demand for the machinery and equipment of all sorts of industrial plants—especially textile mills, sugar manufactures, metallurgical plants, mines, manufactures of machinery and machine tools.

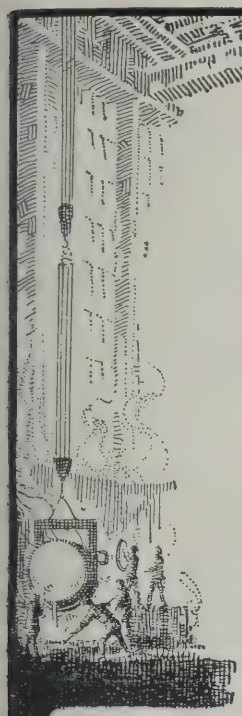
Big Mill for Calgary

Alberta Flour Mills, Limited, Are Proceeding With Erection of Plant in East Calgary

Among the important developments in the industrial field during the past few weeks, states the *Monetary Times* of Toronto, is the organization of the Alberta Flour Mills, Ltd., the stock of which is being sold by the Manitoba Finance Corporation. The company has under construction what will be a very large flour mill in Calgary, Alta. The new plant will have a capacity of 6,000 barrels of flour a day and the storage elevator will have a capacity of one million bushels. The capital of the company is fixed at $5,000,000. Of this sum $2,500,000 will be in the form of bonds, and this amount will be supplied from London, England, by a corporation known as the Investment Registry. The balance of $2,500,000 is in the form of common stock, and it is the intention of the directors to place all this stock in the prairie provinces, with the exception of such amounts as may be incidentally placed by the directors among personal friends in other parts of the world.

It was the original intention of the Alberta people who are interested in this enterprise, to secure practically every dollar needed for the purpose in the Province of Alberta. This was found impracticable owing to successive crop failures, and it was decided to endeavor to place at least $500,000 in the Province of Manitoba. The Province of Alberta has already, in spite of conditions which obtain there, subscribed a million. If Manitoba takes at the present time half a million, there will remain one million still to be sold, and it is expected that this will be distributed among the four western provinces. Vancouver is interested, since the city hopes that a considerable quantity of the grain ground in Calgary may be shipped through that port, and people there have volunteered, if given the chance, to push the project along.

The stock is being sold at $100 a share, 25 per cent. on application, 25 per cent. on allotment, and the balance within 90 days. Considerable of the work has been done on the mill and elevator. The site is on ten acres in east Calgary, and connection is made with all three transcontinental railways there. It is the expectation that the $500,000 worth will be placed in Manitoba within thirty days and that the campaign will be over before the selling of Victory Bonds begins. The president of the company is Mr. George Lane, and the vice-president is Mr. A. E. Cross, two well-known Alberta residents.



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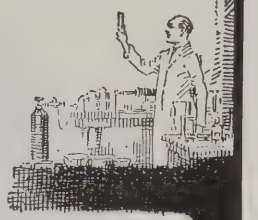
—that oil, water, or even more complex material you are using in your manufacturing? Has it the requisite properties? Are you ***positive*** it is doing what you think it is?

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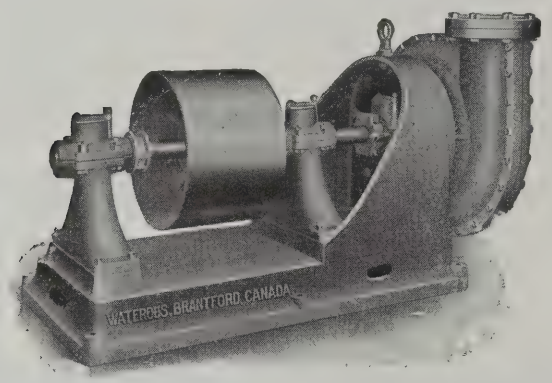
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BETTER LIGHTING FOR FACTORIES

Good electric lighting speeds up production, reduces spoilage, prevents accidents and conserves man power. General requirements of good lighting are set forth and its economic advantages explained. A record of tests that were made in Canadian factories.

By Thomas F. Chantler.
(From "Safety Engineering.")

Without sight, manufacturing would be impossible. Without light man's efforts at manufacturing would be worthless. And with only a "dim, religious light" to guide his efforts man's manufactured product proves to be almost as much of a liability as an asset.

These are things so obvious that no manufacturer would care to confess that he had not known them always. Nevertheless, it required the repeated urgings of our Allies in the war for more and yet more speed in furnishing supplies to arouse employers generally to a recognition of the criminal extravagance of poor lighting in shop, factory, mill, mine and shipyard.

Four States, Wisconsin, New Jersey, Pennsylvania, and New York, already have lighting codes supported by the legislation necessary for their enforcement. And from the art of aiding man's efforts by truly good illumination a definite science of lighting is rapidly being evolved. Also insurance companies writing workmen's compensation policies are advocating good lighting as a safeguard against accidents. Scientific bodies are pointing out the injuries to the eyes and health of the worker traceable to poor lighting. Finally, it is being shown by facts and figures deduced from actual tests that good lighting actually does serve to speed up production, reduce spoilage, prevent accidents and conserve man power in manufacturing and industrial lines.

No Denying Importance of Question

Few men if any are in a better position to recognize the requirements of American manufacturing as a whole than the Hon. William C. Redfield, Secretary of Commerce, and he has been quoted as saying:

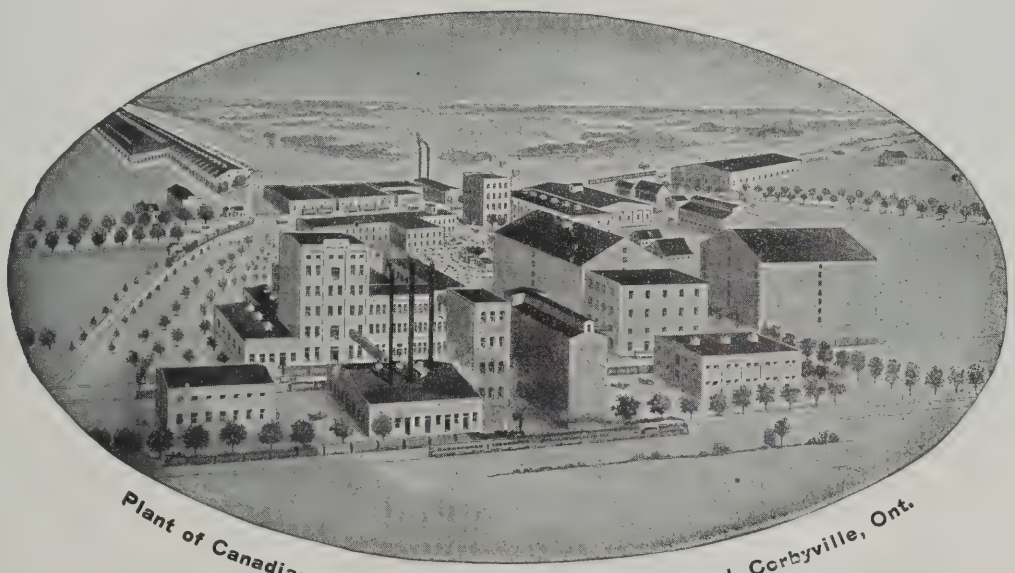
"I confess it seems to me somewhat surprising in this day that anyone should doubt the necessity of proper industrial lighting. Lighting of the very best kind has a double value in industry. It has, in the first place, a direct bearing upon the quality and quantity of output and it has, secondly, quite as important, perhaps more so to the community, a direct effect upon the man who does the work. If he must work under eye-strain, he not only cannot do as good work and can only do less work than otherwise he would, but he does it with direct injury to his own future working capacity. From a human standpoint, therefore, it is a social wrong not to provide ample light. From an industrial standpoint, the investment in light is one of the most sensible a manufacturer can make."

And when it comes to expressing the sentiments of labor itself regarding the workers' need for adequate lighting what could be more illuminating than this utterance by the venerable Samuel Gompers:

"Good factory lighting has proved a sure means of forestalling accidents to workmen, and I am glad that American industry is waking up to this fact."

But in addition there are what might be termed dollars-and-cents reasons why the manufacturer should do everything possible to supply his workers with the best illumination available. Good lighting has been definitely shown to contribute to the prevention of accidents and the consequent reduc-

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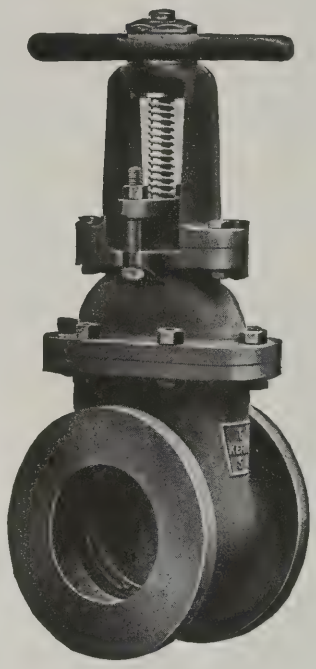
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tion in insurance company rates for workmen's insurance. President Butler, of the Travelers Insurance Company, says:

"Insufficient or improper illumination is a direct or contributory cause of many accidents in workshops. This is a proven fact which is recognized by the Travelers Insurance Company in its rating schedules under workmen's compensation practice."

Again, and referring to New Jersey, one of the States boasting a Lighting Code, Lewis D. Bryant, Commissioner of the Department of Labor, has been quoted as saying:

"If a workman is injured, and poor light is the cause, he will surely receive compensation. On the other hand, if a workman ruins his eyes by constant work under poor light so that he is incapacitated for further work, it will be difficult for him to obtain fair compensation. He is disabled because of his occupation just as surely as if he had lost an arm or leg at his daily task. It is the duty of every employer to provide good light as a guard against accidents and eye trouble."

By way of substantiating the foregoing opinions regarding the need for better lighting it is pertinent to refer to the statements of R. E. Simpson, of the Travelers Insurance Company, in a paper presented before the Illuminating Engineering Society on October 10, 1918 :

"A survey of 91,000 accidents from the records of the Travelers Insurance Company for the year 1910 showed that 23.8 per cent. were due to improper or inadequate illumination."

The same authority explains that it is hardly possible that this percentage prevails at present, due to the progress in illumination, but he goes on to say:

"There is some foundation, however, for assuming that 18 per cent. of our industrial accidents are due to defects in the lighting installation. On that basis the services of 108,000 men for one year are lost anually, because the illumination provided is not adequate for the safety of the workman."

What constitutes good lighting? That, doubtless, is the question uppermost in the mind of the reader who has grasped the significance of the opinions and the figures given. And doubtless one's unaided answer to that question would be, "Light without stint." But the sun's light is without stint, so to speak; and we all know of the many instances when it is too intense and too abundant, is a definite source of pain and injury to the eye. So a more nearly correct definition would be: An equivalent of diffused daylight, both in intensity and color of lighting. But we still fall short of the mark. Daylight is of many degrees and varieties, some of which occasion almost as much eye-discomfort as direct sunlight.

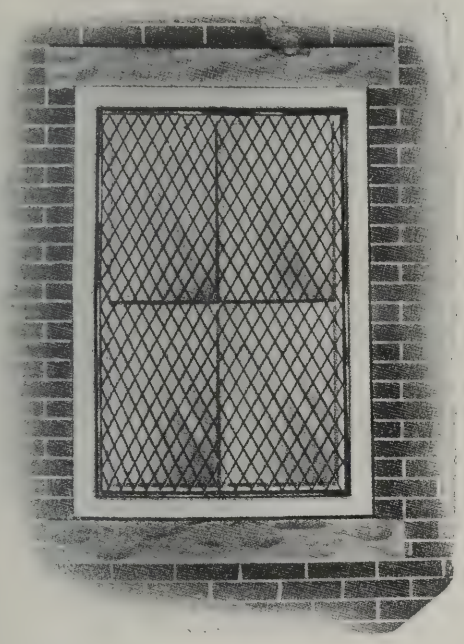
When the Light is Ideal

Now it is generally conceded that the ideal lighting occurs on a cloudy day when light from the sun must pass through a screen of vapor and clouds before reaching us. So it would seem that Nature, herself, is at her best when supplying a *semi-indirect* form of lighting.

When, as on a clear day, the suns rays fall directly upon us Nature might be said to be supplying a *direct* form of lighting. And when man and Nature combine to have the direct rays from the sun reflected from outside a building through windows against which actual rays do not strike, an *indirect* system of lighting is obtained.

The lighting codes of New York, New Jersey, Pennsylvania, and Wisconsin all vary somewhat, one from the other; and other States as they come to adopt codes may make certain conditions peculiar to their own interpretation of the requirements. However, the general requirements of good lighting may be given simply and briefly.

1. There must be on all working surfaces, whether in horizontal, vertical or oblique planes, a steady light of sufficient intensity for all working requirements.
2. A light on areas and walls adjacent to the working area comparable in intensity to the light on the working areas.



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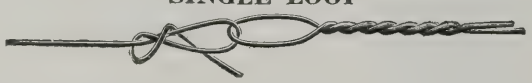
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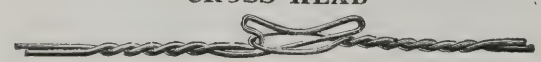


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(Note: When a lighted area is too sharply in contrast with darker surrounding areas the worker's eyes are taxed unduly every time he has occasion to look away from the lighted area, the eyes being required to focus violently in accommodating themselves to the transition.)

3. The light must be of a color and specular character suited to the purposes for which it is employed. (Note: An object is seen by the light it reflects, rather than by the light falling upon it. A white or light-colored surface reflects more light than a dark one. But all classes of work do not require the same intensity of lighting. Again, red and yellow light rays have greater penetrating power than blue rays, and that fact must be observed in lighting places like foundries having heavy cloudy atmosphere. But, on the other hand, the moulder requires less light than the tool maker. The actual lighting requirements according to the character of the work, may range from ½ to 15 foot candles.)

4. There must be freedom from glare and from glaring reflections. (Note: The meaning of glare can be suggested easier than it can be defined. According to the dictionary one is experiencing what is meant by "glare," as used in the terminology of lighting, when such conditions as these are to be noted: (1) To shine with fierce intensity, (2) to be unpleasantly brilliant or gaudy, (3) emitting an excessively brilliant light, (4) having a glossy, smooth surface, (5) a dazzling light. However, those definitions are not wholly above criticism. For example, the automobile headlight which dazzles, and at night may truthfully be said to "shine with fierce intensity, to be unpleasantly brilliant and to constitute a dazzling light." But when that same automobile headlight is viewed against a background of daylight it is not to be recognized by any such definitions. Also, there are conditions under which glare is present in sufficient degree to work injury to the eye without the mind being acutely conscious of its effect. Someone, too, has said that just as dirt is matter out of place glare is light out of place.)

6. The lighting equipment should comprise a system which is reliable, simple, easy of maintenance and reasonable in initial and operating cost.

Now the spirit and letter of those six stipulations are easily within the financial reach of all employers of labor, and the rewards to those providing truly good lighting are certain.

The Lighting Committee of the Commonwealth Edison Company, of Chicago, recently conducted tests to secure figures which would establish the value of good lighting in definite terms. Four of those tests have become, temporarily at least, classics in the annals of progress in illumination.

Tests in Iron Pulley Finishing Shop

This shop finishes iron pulleys, both large and small, and is some 40 by 80 feet in extent, giving an area of 3,200 square feet. As found, the illumination was largely by 60-watt lamps on drop cords, a few only being fitted with miscellaneous tin shades of the cheapest varieties. The consumption of electricity amounted to 0.27 watt per sq. foot; and the illumination therefrom averaged about 0.2 foot candle. But this light, of course, varied tremendously in intensity; one operator having something like 22 ft. cdl., while others groped about in a "spooner's" light of about 0.07 ft. cdl. The daylight effect, except on one or two machines, was negligible, the windows being few and dirty.

The installation the lighting committee installed consisted of 200 watt, reflector-equipped units mounted some 10 feet above the floor. The electrical consumption was increased almost 7 times, and the average illumination approximately 25 times.

The testing engineer's own records showed an average increase in production of 20 per cent. The proprietor also kept a set of records; and according to his figures the increase in production amounted to 35 per cent.

The cost of the improvement, with due allowance for depreciation, upkeep, etc., added 5½ per cent. to the monthly

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payroll. In other words, from 20 to 35 per cent. increased production at a cost of 5½ per cent. of the payroll.

This shop measures 48 by 50 feet. Practically the only change found necessary had to do with increasing the size of the lamps, the equipment and layout of the lighting system being declared satisfactory.

Test in a Soft-Metal-Bearing Machine Shop

In this shop, to begin with, 25 deep-bowl reflectors were equipped with 100-watt lamps giving an illumination of 4.6 ft. cdl., the consumption of current being about 1 watt per sq. foot. The shop was run with this equipment, for one month, the management's regular records proving quite sufficient to show output accurately.

At the end of one month, the 100-watt lamps were replaced by 200-watt gas-filled lamps, raising the consumption of current to 2 watts per sq. foot. But because of the greater efficiency of the lamps the illumination was raised to nearly 13 ft. cdl.

It was the intention to revert to the original lighting intensity for the third month, and then back to the increased inensity for the fourth month. But after the second month's experience, using the daylight level of improved lighting, the management flatly refused to go back to the original equipment of 100 watt lamps. They held that the increase in their production as made possible by the improved lighting was vastly more important than the testing engineer's desire to secure entirely unbiased data.

The increased efficiency and production was determined by a study of eight operations. The increase ranged from 8 to 27 per cent., the average increase being 15 per cent.

The high percentage of increase secured through improved lighting is of particular significance in this instance, because the original equipment of 100 watt lamps supplied a measure of illumination held to be at least 20 per cent. superior to that of industrial lighting generally.

Test in Machine Shop Handling Heavy Steel Parts Used in Truck

This shop measured 40 by 58 feet. The same number of lighting units, reflectors and accessories were used for the improved lighting as had been employed originally. The only change was from 100 watt gas-filled lamps requiring a consumption of 0.6 watt per sq. ft. and having a lighting intensity of 3 ft. cdl. to 300 watt lamps consuming 1.7 watt per sq. ft. and giving nearly 12 ft. cdl.

The improved lighting resulted in an increase of from 6 to 14 per cent. in three operations, the cost of productive intensity being 1½ per cent. of the pay-roll.

Test in Carbureter-Assembling Shop

This shop measured 50 by 80 ft. In the work of assembling carbureters the operators handle rather small parts and make delicate adjustments. The management fully appreciating the importance of good lighting had installed equipment well above the average even before the test was made.

The old equipment comprised 100 Mazda lamps, principally of the 40 watt size giving an average illumination of a trifle over 2 ft. cdl. For the productive intensity runs, the 100 units were replaced by 29, nearly doubling the consumption of current, but increasing the intensity nearly six times.

This test was made just after the signing of the armistice, but despite the previous efforts of the management to speed production and the uncertainty regarding the need for continuing to speed production occasioned by the cessation of hostilities, the productive intensity of the shop was increased



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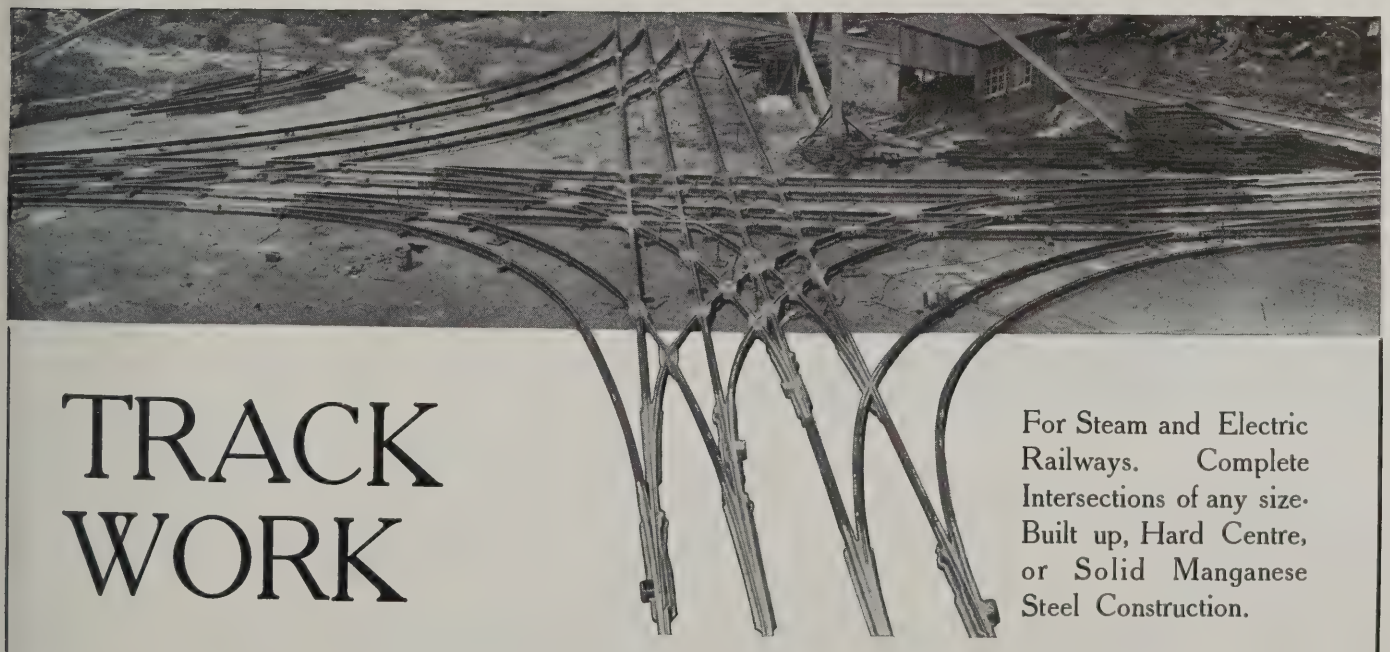
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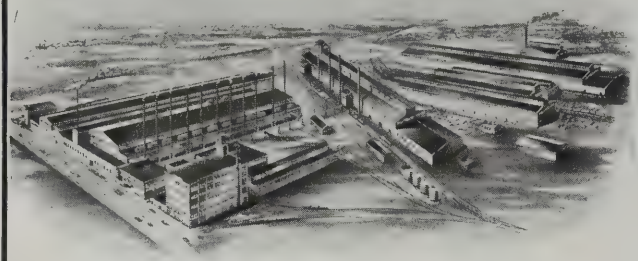
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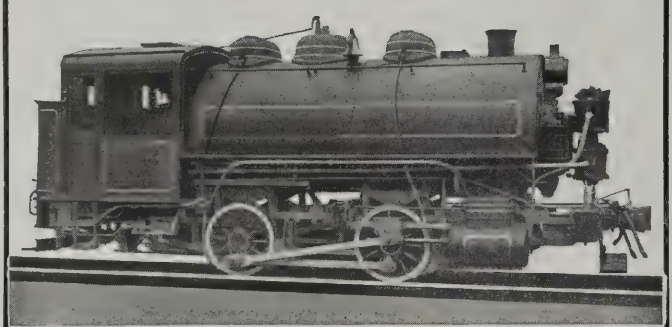
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12 per cent. Because the number of workmen was large and the rate of wage high, the increased production was secured at a cost of only 0.9 per cent. addition to the payroll.

The Candle as a Unit of Measure

Doubtless all are familiar with the term "candle power," but probably few aside from those having made a study of lighting are precisely informed as to the exact significance of that term. Nevertheless, the explanation is within the understanding of even the school boy and may be given in a few words.

When new light sources began to take the place of the candle it was but natural that their superior illuminating power should be expressed in terms of the candle familiar to all. Doubtless early comparisons were made by setting up the candle and the lamp in the line of vision and gauging them by means of the eye, the most natural direction in which to look at the illuminants being the horizontal. The strength of the new illuminants were rated as being the equivalent of so many candles. Thus when we say to-day that a lamp is of 10 candle power we really mean that its lighting intensity or strength in a horizontal direction is equal to that of a group of 10 standard candles. The one essential to remember in this connection is that the stated candle power of a lamp represents the intensity in one direction only, it does not indicate the total quantity of light emitted by that source.

The mean spherical candle-power of a lamp means simply the average of all the candle powers in all directions about that lamp. That is to say, a source giving 1 candle-power of light in every direction would have a mean spherical candle power of 1. Or if the intensity of light in different directions varied but the average of all was the equivalent of 1 candle in intensity, then this source, too, would have a mean spherical power of 1.

The foot-candle is the unit of measurement most intimately associated with the popular understanding of lighting. A foot-candle represents an intensity of illumination equal to that produced at a point on a plane which is 1 foot distant from a source of 1 candle and which is perpendicular to the light rays at that point.

How Light is Measured

A crude idea of the foot-candle of illumination can be obtained by considering the intensity on a newspeper being read by the light of 1 candle, the paper being held 1 foot away from the candle. Two candles would give 2 foot candles of light under similar conditions; 3 candles would give 3, and so on.

The lumen is the unit for measuring the quantity of total flux of light emitted by a source. This can be explained by imagining a sphere measuring 2 feet in diameter on the inside and painted black, so that light falling upon the inside surface of the sphere from a candle placed exactly at the centre will be absorbed and none of it reflected. Now if an opening measuring one square foot be cut in the sphere the amount of light that escapes is considered to be the unit of quantity, and is called a *lumen*. If 2 candles are used then 2 lumens of light will be emitted, and so on. By geometry it is known that the total surface of a sphere having a diameter of 2 feet is 12.57 square feet. Thus if the mean spherical candle power of a lamp is known we have only to multiply this value by 12.57 in order to obtain the number of lumens emitted by that lamp.

By the foregoing operations it is shown that the intensity of light falling upon 1 square foot of the inside surface of a sphere 2 feet in diameter and having a candle placed directly

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at its centre is 1 foot candle. We also know that the quantity of light direct from the candle which falls upon 1 square foot of the surface of that sphere is 1 lumen. This gives us the important law that when 1 lumen is so utilized that its total light is spread over a 1 foot square surface, that surface is lighted to an average intensity of 1 foot candle. Through this relation the designing of a lighting installation is greatly simplified. Because once the number of square feet to be lighted and the required intensity of illumination are known, it is easy to determine how many lumens must fall on the working plane. To illustrate, should it be necessary to illuminate a working surface of 100 square feet to an intensity of 5 foot candles, 500 lumens must be utilized.

Facts the Man Interested in Better Lighting Should Know

The methods of artificial lighting have been mentioned previously in connection with Nature's way, but it will not be amiss to point out that lighting, to begin with, is either local or general. Sometimes, too, both systems are combined. The form of light-distributing may be either (1) indirect, (2) semi-indirect, (3) direct.

Indirect lighting screens source of light and allows only reflected light to reach the working plane.

Semi-indirect lighting screens source of light but allows a certain amount of light to diffuse through shade.

Direct lighting requires that a shade or reflector be placed around the light so that direct and reflected light are thrown on the working plane.

Diffusion of Light is Essential

Adequate diffusion is held to be absolutely essential to good lighting. That is to say, the light at any one point should come from a number of different directions so that shadows are soft and transparent. Also, the lighting must be in sufficiently large areas to occasion only soft shadows and at the same time be small enough in area to afford ample direct light. As a general rule, too, light walls and ceilings add to the general efficiency of the lighting, and save eye-strain by minimizing contrasts between working light and that which lies about it.

Daylight of Winter Seldom is Adequate for Inside Work

The outside light on a bright summer day has been estimated to equal the equivalent in intensity of 5,000 foot candles. Work is generally possible inside a building with a daylight factor of 1/10 of 1 per cent. or 5 foot candles. But British tests have shown that on the average December day the outside daylight does not exceed 750 foot candles even at noon. Hence on the basis of 1/10 of 1 per cent, the inside factor will be less than 0.75 foot candles during practically all daylight hours during the winter. It is estimated by the way, that the proportion of outside light which reaches the inside of a building through windows seldom reaches 10 per cent., and very frequently is as low as 1/10 of 1 per cent. at various points.

Light Required Should be Determined by Competent Authority

One thousand foot candles doubtless would be insufficient illumination for threading a needle if the needle be held against a steel-gray background. But if the needle be held against a white background, ½ foot candle light is ample. The man best equipped to determine the details of the lighting equipment is of course the man best informed regarding the available lighting expedients and requirements—the illuminating engineer, that is to say.

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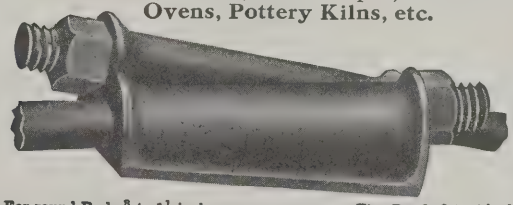
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SALVAGING THE SCRAP HEAP

A good deal of attention is being given in up-to-date plants to the reclamation of materials and supplies that were formerly regarded as useless scrap, and which were sold at an insignificant figure. There are many instances of savings, secured by an intelligent study of this problem, which vary in value from a few hundreds to hundreds of thousands of dollars.

By Johnson Heywood.

(From "Factory, the Magazine of Management.")

After everything possible has been done to prevent making scrap, it becomes necessary to realize the greatest possible value out of such material as has found its way to the scrap pile.

This can be done in one of three ways, depending upon the product and the nature of the scrap:

1. A way may sometimes be found to utilize the waste material in the product.

2. New products may be added for which the scrap can be used as the raw material.

3. Steps may be taken to make the scrap worth more when they are sold.

The way one shop utilized its cast-iron chips and borings is an example of the first method. It had been the custom to dispose of this waste to the junkman, but when the price of No. 2 pig iron went to $48 a ton, and the borings brought only $8, even before freight was deducted, a serious attempt was made to remelt this scrap in the shop cupola.

It was soon found, though, that chips and borings thrown into the cupola burned up instead of becoming molten. All castings poured from a mix containing even 5 per cent. of such borings were either badly pitted or else filled with spots so hard that to machine them was impossible.

Handling Chips and Borings

The problem this shop faced, therefore, was how to heat the chips and borings slowly enough to cause them to melt, but not burn. Borings could, of course, be heated separately from the pig and scrap iron in a small blast furnace, but the additional cost of this double handling made the method inadvisable.

It was decided to put the borings under pressure and press them into a solid mass resembling an ingot, so an experimental press was rigged up. A hollow steel container about 20 inches long, with an inside diameter of 6 inches, and open at both ends, is secured to a movable slide, which keeps the container always centred below the ram which is attached to the headblock. A steel slab, 1½ by 7 by 15 inches, in one end of which is a circular opening, 6¼ inches in diameter, is so placed on the ram-cap of the press that either the opening or the solid end may be slid under the container.

This container is charged by means of a sheet-metal hopper which contains several hundred pounds of chips and borings. The flow is actuated by gravity and controlled by a simple sliding gate. After the container has been filled, a small quantity of salt water is added and the contents rammed by hand. Pressure of approximately 6,000 pounds to the square inch is then applied. When compression has ceased the pressure is removed, the steel slab on the ram-cap moved so that the opening in the slab is directly below the opening in the container. Pressure is again applied and the borings are forced out of the container through the opening in the slab to a receptacle below. The salt water causes



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rapid oxidation of the iron and in 12 hours the borings are dry, the mass hard and in a shape that is easily handled.

Borings in this form were made the object of several experiments, and a mix containing 25 per cent. of pressed borings was poured with excellent results.

From this small and rather crude arrangement a 50-pound block is pressed every two minutes, or approximately seven tons a day, at a total labor and expense cost of $1.10 a ton. When this method was first put into effect, loose borings brought only $8 a ton. Therefore, considering the total cost to be $9.10 a ton, we have the following cost of the new mix containing pressed borings.

In an average daily "pour" of 30 tons, there is used:

55% No. 2 pig iron	16.5 tons at	$48 00	=$792 00
25% pressed borings	7.5 tons at	9 10	= 68 25
20% scrap iron	6.0 tons at	15 00	= 90 00
100%	30.0 tons		$950 25

Prior to using the pressed borings, the mix contained:

60% pig iron	18 tons at	$48 00	=$864 00
40% scrap iron	12 tons at	15 00	= 180 00
100%	30		$1,044 00

This gives an average daily saving of $93.75 by this simple plan.

Widely different in method but the same fundamentally is the way one automobile manufacturer used the packing cases in which some parts of his car are received. When he realized the great amount of good lumber being thrown out daily after these cases were unpacked, he drew up a careful set of drawings and specifications, and demanded that his supplier make all further cases to meet his needs.

He made slight changes in the dimensions, insisted that the cases be put together with screws instead of nails, and even specified the size of screws to be used and the exact location of every screw hole. When the accessory supplier received the specifications covering the cases, he agreed to ship in them but at a considerable increase in price.

Putting Boxes to Good Use.

The automobile maker was willing to pay extra for them, for by simply disassembling the packing cases, he is now able to use the sides, tops, and bottoms for floor boards for his cars without performing an operation on them. They fit even to the screw holes and the screws come with them. Thus he not only is saved the expense of making the floor boards but does not have a lot of practically worthless packing cases to dispose of.

In a hat factory waste ribbon is now used to take the place of material that formerly was purchased.

After the band of ribbon is put around the crown, a bow is sewed on the left side as a finishing touch. This requires two kinds of ribbon—what is known as 11-line and 12-line—one for the banding and the other for the bow.

Ribbon for the bands comes in rolls of approximately six yards, which leaves over a piece from four to six inches long on each roll which ordinarily is either thrown away or collected and sold for scrap.

Investigation showed that this piece could be used in making the cross-piece of the bow in place of the bow ribbon which was formerly used. Since a roll of ribbon bands a dozen hats, it is now possible to use the waste piece on one out of every four hats. In this hat factory, which turns out a normal production of 200 dozen hats a day the year

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round, the saving is about 6,000 yards of bow ribbon in a year.

In some instances material is so completely wasted that the scrap or waste is not even visible. The sewer or the river is the scrap pile.

That is particularly true in those industries using acids, chemicals and sundry materials of that sort. The savings to be made by reclaiming them is often well worth while because of their ordinarily high cost.

Waste of Enamel

A recent experience in an enamelware factory illustrates quite forcibly the undeveloped possibilities that often exist.

It was noticed that after the second coat of enamel had been applied, a girl wiped, with a wet sponge, the beaded edge of the various articles coated, so as to make it possible to apply an enamel of some other color on the bead.

The sponge was continually rinsed, and the enamel that had accumulated on it allowed to run to the sewer.

To prevent this, separate pails filled with water are now given to each operator, with instructions that she rinse her sponge in the pail. Several times a day the contents of the pails are poured into a larger receptacle. The enamel settles to the bottom, making it easy to siphon off the water.

A test was made for several weeks and it was found that 2.87 per cent. of the enamel used was reclaimed in this fashion. Furthermore, the enamel was ready for immediate reuse. It loses none of its properties.

Such a method is applicable to many industries. In fact, one superintendent says that in his business running water and the sewer are the greatest encouragers of material waste.

Quite similar is the saving of ink made in some printing plants. It may be worth telling to show how nearly universal the method is.

In large printing establishments the ink is "dipped" out of cans and applied to the ink plate of the presses. This "dipping" process almost invariably leaves a fraction of the ink, which is of a heavy consistency, in the can, around the sides and on the bottom. The cans can be soaked in a solution, which in turn is poured into a concentrating tub or larger can. When the ink has settled to the bottom the solution can be poured off and the ink used.

Intensive Study Brings Results

Usually a little intensive study of the product, keeping in mind the waste, will show many ways of utilizing the waste. For example, there is the tinware manufacturer who punches the spouts for tea-kettles from the odd-shaped pieces of metal that come from the blanking presses. This same plant had been cutting sheets of metal into strips to bind its export cases, while at the same time strips made in the plant were being baled and sold as scrap, as described in the last article.

In a wagon factory a sawyer stood all day at his cut-off saw, making short pieces of wood out of long ones for spokes. In another part of the plant another man was cutting other long pieces into very short ones for another purpose.

The first operator could cut very few of his pieces exactly without waste. Every night the janitors carted out hundreds of short ends to the boiler room. And all the time these short ends could, depending on their length, have been used for any of a half-dozen parts that other sawyers were cutting from long lengths. This is not an uncommon occurrence elsewhere.

To-day each sawyer is given a list of the length of pieces used throughout the shop and he plans his cutting of each

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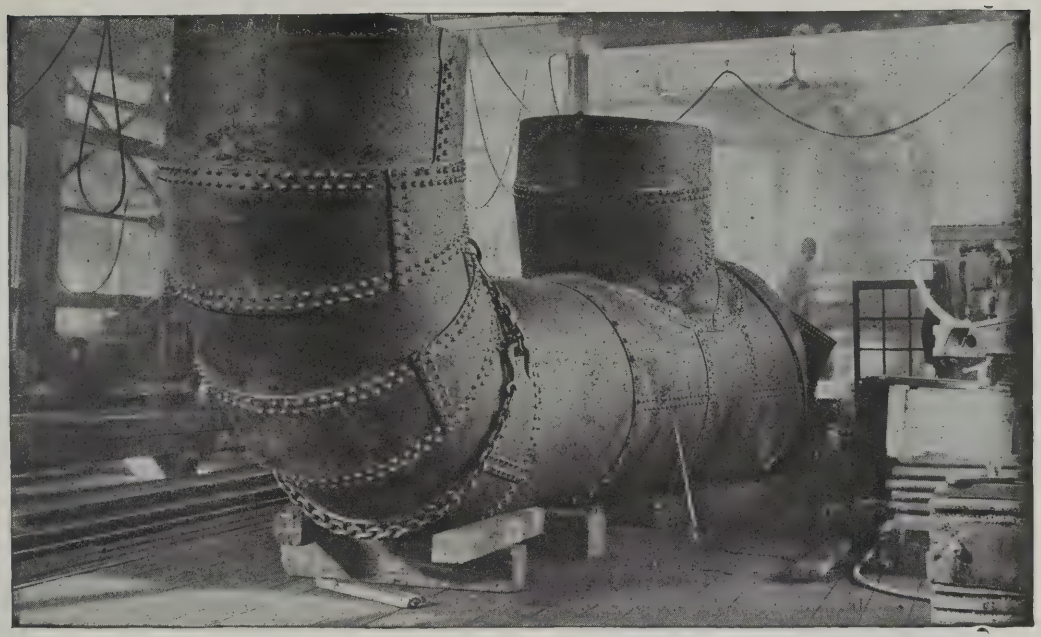
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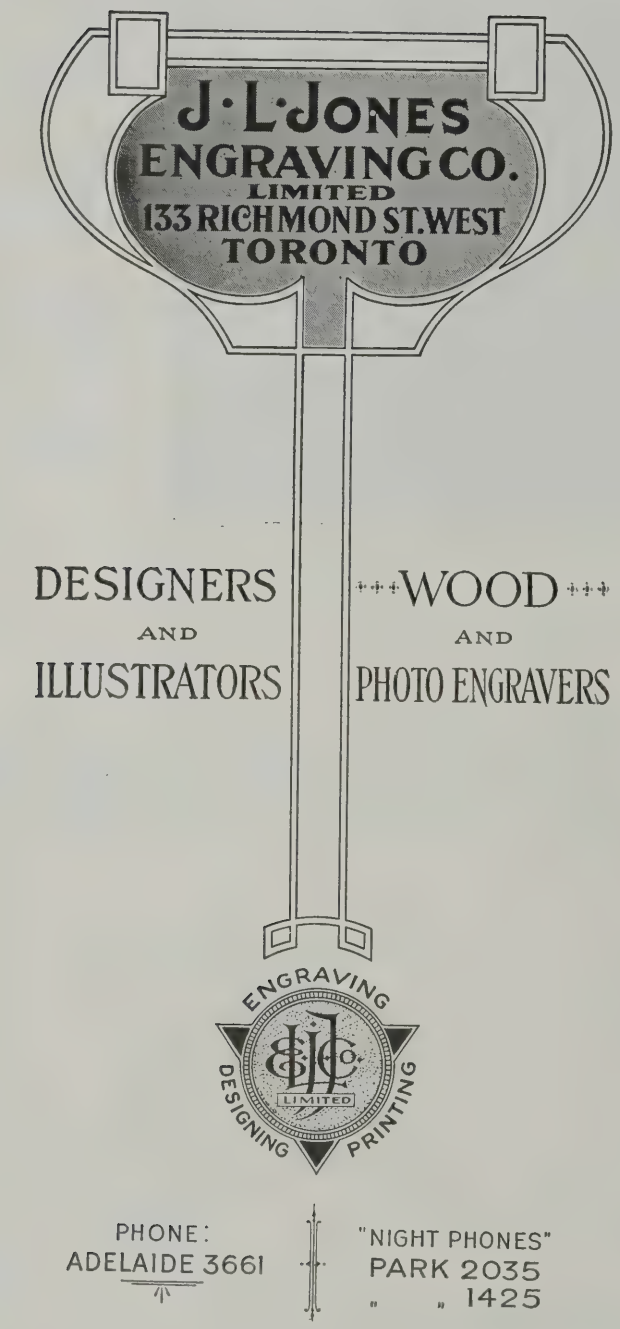
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length with this in view. Practically nothing goes to the furnace now but sawdust and pieces an inch or two long.

It must be remembered, however, that sometimes it costs more in labor to use the odd left-over pieces of material than they are worth. This is easy to determine if the concern has a proper cost system.

Frequently it is desirable to take on a new line of product solely to use up the odd scraps of material that cannot be used in the principal product.

A glove maker, for instance, found that no matter how carefully his cutters planned to use up the skins, it was impossible to avoid leaving over great numbers of small pieces that could not be used in gloves. So he now makes them up into leather penknife cases, watch covers and small change purses and gets a higher price for them per square inch of skin than he gets for his gloves. Formerly these scraps of skin had absolutely no value.

A counterpane manufacturer cut from each corner of his counterpanes a nearly square piece of cloth, containing about 70 square inches, so that the counterpanes would fit around the bedposts. That is 280 square inches for each unit of product and amounts to many hundreds of dollars a year in raw material. The corners were formerly sold to paper mills.

A few cents labor on each now turns them into babies' bibs and they bring nearly 100 times as much a pound of material as he formerly received from the paper mill.

Putting Wood Waste to Use.

Farm implements and butchers' blocks may seem to be products too diversified to go well together; yet a farm implement manufacturer gets a handsome price for his wood waste in the form of blocks. The wood is all in very small pieces of high quality hardwood. These pieces are covered thoroughly with glue and compressed in heavy presses to make the butcher blocks.

Some furniture manufacturers use short ends and scraps of wood to make children's tops, alphabet blocks and other wooden toys. One showcase concern has a waste of a great deal of broken glass and small pieces left over after cutting. This is used to make leaded glass fronts for bookcases, as well as windows. There is as much profit in these leaded panes as in the regular product.

It is perhaps trite to refer to the often mentioned outlets the meat packers have found for the hair, hoofs and other wastes incident to manufacturing meat. But the fact remains that nothing which comes into the packing plants as raw material leaves as waste or scrap. It is all finished product which sells at a good price, whether it be lamb chops, fertilizer, porterhouse steak, hair mattresses, sweetbreads or violin strings. It might pay any manufacturer to visit a packing plant in the hope that he would be inspired to see new ways to utilize his waste materials.

The opportunity for taking on new lines of product to match the material wasted in making the existing one is present in nearly every industry. The trouble is that most manufacturers cannot be expected to know all about every other product different from his own that finds a sufficient demand in the market.

Therefore it frequently pays to call in outside help. A few hundred dollars spent for the services of a consulting chemist will frequently result in finding a use or a profitable outside market for a seemingly useless scrap or by-product.

A gas company, for example, had a waste liquid analyzed and found it to be the basis for the new high explosive, TNT, and worth several dollars a pound. It had been going down the sewer.

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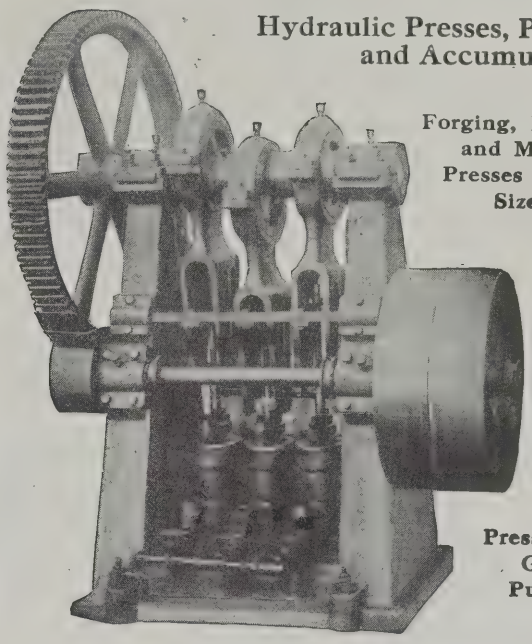
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Do not be afraid to tell your workman to discard a Famous Five File as soon as it becomes dull. You will have obtained the maximum service before its usefulness is gone.

Famous Five Files are hardened by a special process which increases their durability.

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Made in Canada by



A tanner had been allowing a waste product to go into the river until a chemist told him that it was a coagulant which is used in filtration plants.

Industrial engineers, too, are often able to point out uses for scrap because of their familiarity with other industries and their knowledge of the raw materials used in most products.

Selling the Scrap

This brings us to the third method of salvaging—that is to sell the scrap for the most that it will bring. As just shown, it is sometimes possible to find that the, to you worthless scrap is the valued raw material of another industry. That means that by selling it direct to those who need it, it is often possible to get a considerably higher price than the junkman will give.

For instance, spring steel of high quality is an expensive material to throw away. Automobile springs are pointed by cutting two triangular pieces from each end. This waste amounted to many thousand pounds a year, which as scrap brought comparatively nothing.

It happened that this spring maker employed an industrial engineer who had had experience in a farm-implement plant. He suggested that these triangular pieces of spring steel could be well used for the teeth of spring-tooth harrows. Negotiations were opened, resulting in a permanent agreement that the harrow concern would take the entire output of spring steel scrap. It not only served the purpose but the shape of the pieces saved considerable cutting and other labor in the harrow plant. This is one way to realize a higher price on scrap that must be sold.

A good deal of attention is being given in up-to-date plants to the reclamation of materials and supplies that were formerly regarded as useless scrap and which were sold at an insignificant figure. There are many instances of savings secured by an intelligent study of this problem, which vary from a few hundred dollars in smaller plants up to the hundreds of thousands salvaged annually by some of the larger industries.

It is safe to say that no plant is entirely free from a constant accumulation of miscellaneous "junk," such as discarded tool steel, wornout shafting, broken castings, bolts and nuts with bruised threads, and a thousand and one things which are cast aside because they do not serve any useful purpose in their existing condition. An examination of the typical shop usually shows piles of such discredited articles lying under machines and in out-of-the-way corners, where they sometimes remain unmolested for years. Also many storerooms are simply junk piles of obsoleted or worn-out tools and jigs.

How Junk is Handled

One plant has solved this problem by establishing an enclosure near the storeroom, where all discarded articles are delivered before any disposition is made of them. No foreman is allowed to retain in his department any tools, equipment, materials, or supplies which are not serving, or capable, in their existing form, of serving some necessary useful purpose.

All such articles are sent to the scrap room, where they are examined by the master mechanic. He determines their value and decides what can be salvaged and what must be disposed of as scrap.

The plant operates a repair department, where a number of machine tools are installed. Damaged bolts are cut off, or turned down or rethreaded; discarded pieces of shafting are selected for work requiring smaller diameters; broken drills are cut off and repointed; and an endless number of other articles are converted into useful forms.

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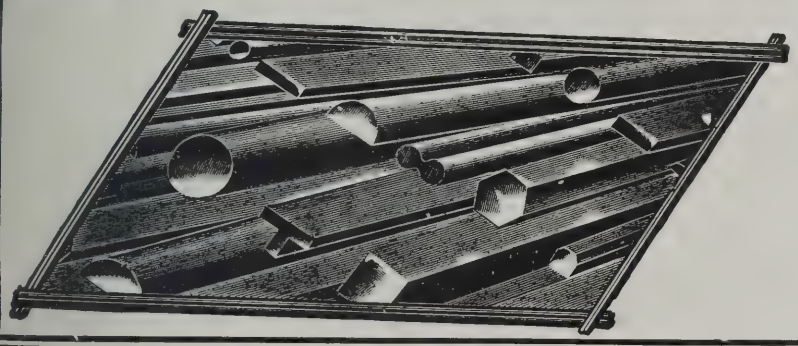
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Here again judgment must be used, for it is easily possible to spend more on reclaiming the scrap than the tool would cost new. A simple formula will show wheher it pays to rework old tools and supplies of this nature. It is: If the labor cost of reclaiming, plus the scrap value of the material, is greater than the cost of new tools or supplies, it does not pay.

Materials and supplies which cannot be reclaimed if sorted out can usually be sold at prices much above those which could be obtained for miscellaneous unsorted scrap.

This plan of classifying scrap yields a high return often. Take rags, for instance, which are readily salable to paper mills. Some kinds of selected rags are worth four or five times what the same rags are worth mixed with others. On one day this year, for instance, the quotation on "new shirt cuttings" was $12.25 per hundred pounds; "blue cottons," $8.25; while mixed rags sold for about $3.

Waste paper is another instance. When certain grades of waste paper sell at from $1.50 to $6 per hundred pounds, the same papers mixed sell at 65 to 75 cents.

In the metals the same holds true. Tool steels worth several dollars a pound will bring but a few cents if mixed with other grades of steel and iron.

As a low grade of common labor suffices to sort out scrap, it is usually well worth the expense involved. Of course it is well to consult trade papers or those conversant with the trade to determine just what classification and selection of scrap should be carried out.

In nearly any plant it is worth while to study the scrap pile closely and decide which of the three methods of getting a higher price for scrap shall be used. Often, in fact usually, all three may be used successfully to yield dollars.

Promoting Good Feeling

J. A. Marven Co., Limited, of Moncton, N.B., Believe in Giving Employees Good Time

An outing in which over two hundred of the employees of the J. A. Marven Co., Limited, and the Havelock Mineral Springs Co., Limited, of Moncton, N.B., participated, was held at the Marven Farm, near Anagance, on September 15. The party went to the farm by rail and spent a most enjoyable day. Dinner and supper were provided by the company, and a programme of sports was indulged in.

In replying to a vote of thanks, Mr. Marven referred to the good feeling that prevailed between the company and its employees. "It has been especially gratifying to me," he said, "during these busy months, to note the earnest endeavor of each and all of you, to give his, or her, very best, in the interest of the J. A. Marven Co., Ltd. I am proud of the spirit of hearty co-operation, evidence of which I see every day in our plant, and which I know, not only exists in the manufacturing departments, but throughout the various branches of our business, the engineers, electricians, shippers, delivery men and the office staff, as well as our very efficient superintendent and sales force. I wish to take this opportunity to thank you one and all. I hope this is only the beginning of many such happy gatherings, and that next year we may be able to arrange another such outing."

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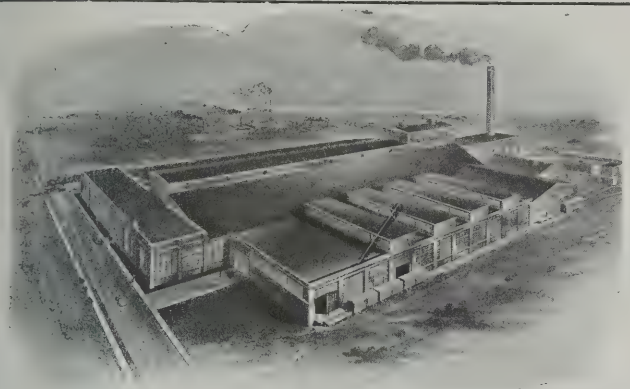
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HIGH SPEED
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Works: LONGUEUIL, QUE.

Among the Industries

Under this heading are published items of news of current interest concerning the activities of Canadian manufacturers. Information about changes of interest, enlargement of plants, and plans for future developments are welcome, and are published free of charge, provided they should not be properly classified as advertisements

ALBERTA.

Edmonton.—The Massey-Harris Co. and the J. I. Case Threshing Machine Co. have taken out permits for the erection of new warehouses.

BRITISH COLUMBIA.

Murrayville.—The Murrayville Toy Co. propose to make extensions to their plant.

New Westminster.—Ratepayers of New Westminster have approved of a free site for the Western Canada Cordage Co., a concern composed of returned soldiers, and the company will immediately proceed with building operations. This is the company to which the Provincial Government, acting upon the recommendation of the advisory board of the new Department of Industry, recently authorized a loan of $200,000 from the $2,000,000 fund which was created by legislation passed at the last session of the Legislature. Tenders for the new buildings will be immediately called for. The company is capitalized for $300,000, of which $100,000 is subscribed by returned men. Each shareholder holds the same amount of shares and each has but one vote. The shares are held on the profitsharing plan.

Orchard City.—The Orchard City Evaporator have purchased the aerated water manufacturing and bottling plant of Western Canners, Limited.

Princeton.—It is stated that work will start shortly on the erection of a mill and concentrating plant for the Canadian Copper Corporation at Allenby, at a cost of about $200,000.

Vancouver.—The Canada Western Woollen Mills, Limited, have been incorporated with a capital stock of $200,000. It is proposed to produce worsted yarns, blankets, rugs and flannels at the start and later to manufacture cloths, etc. The company has been primarily incorporated with the idea of employing returned soldiers and having them become stockholders. The president is Gordon Jonah, of Jonah, Prat Co., Limited, gents furnishings, Vancouver, and the general manager, J. L. Clark, a woollen manufacturer of thirty years' experience.

The Maple Leaf Iron Works are building a new machine shop at 425 Alexander Street.

The Pacific Box Company have started the manufacture of pails.

It is understood that a plant to manufacture and assemble marine machinery will be located on Burrard Inlet on water frontage adjoining P. Burns' packing plant. Estimated cost $1,000,000.

The Gregory Tire and Rubber Co., Ltd., of Akron, Ohio, are having plans prepared for the first unit of the large factory which they propose to erect. The building will probably be two stories of reinforced concrete construction, 200 feet by 80 feet.

White Rock.—The White Rock Packing Company will shortly commence operations, devoting attention principally to the canning of crabs by a special process.

MANITOBA.

Winnipeg.—The Red River Paper Mills, Ltd., have been granted a charter by the Provincial Government, and will probably construct a new mill soon.

The Burgess Battery, Ltd., have opened a factory at 701 Wellington Avenue for the manufacture of dry cell batteries. The head office of this company is at Madison, Wis. L. R. Baker, who was formerly associated with the Canadian Dry Cell Co., has been engaged as manager of the new plant.

NEW BRUNSWICK.

St. John.—The Corona Candy Co. is planning to enlarge its plant.

NOVA SCOTIA.

Halifax.—The completion of buildings for the Halifax Shipyards is being pushed ahead at a great rate and in the meantime excellent progress is being made with the keels already laid for steel freighters for the Government programme. The company has four building berths and is also equipped to carry out all kinds of repair work, for which it gets a great deal of business.

Sydney Mines.—It is announced that the Nova Scotia Steel & Coal Co. will shortly proceed with the erection of a by-product plant, costing over $2,000,000. The erection of the new ovens will mean a further enlargement of the present plant and the necessity for the erection of an additional blast furnace.

ONTARIO.

Belleville.—Ruttan & Ellis' planing mill and factory were badly damaged by fire on September 24, the loss sustained being three or four thousand dollars.

Brantford.—A building for the purpose of manufacturing small motors and electric fans will be put up in Brantford by the Robbins & Meyers Co., of Springfield, Ohio.

The Brantford Computing Scale Co. will make additions to their plant.

Contract has been let by the Slingsby Co. for additional buildings at an estimated cost of $200,000.

The Robbins & Meyers Co., Springfield, Mass., will locate its Canadian plant at Brantford, where it recently purchased a site of ten acres and will erect a plant to employ 350 hands. The company manufactures small electric motors and fans, etc.

The Brantford Scale Co. has awarded a contract for erection of an addition to their present plant. Plans are being prepared to double the capacity of the plant for further additions.

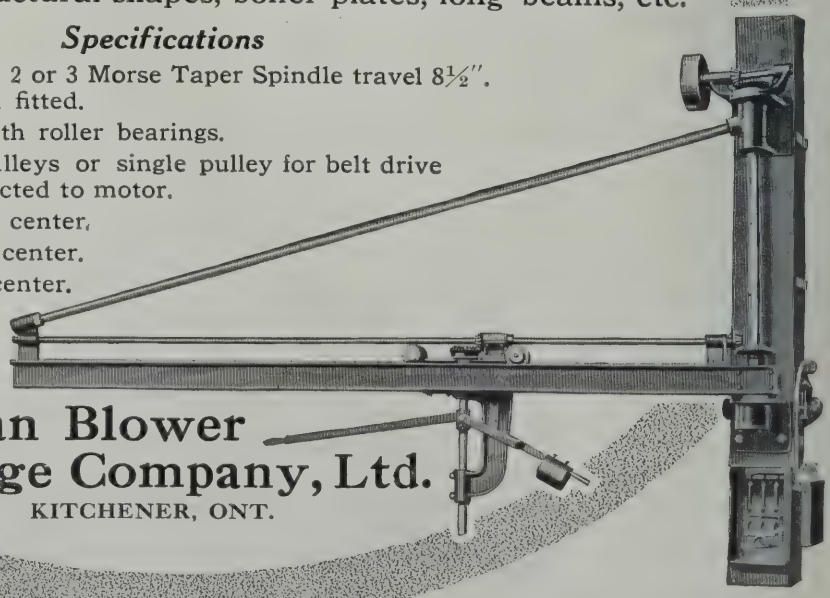
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All gears accurately cut and fitted.
Carriage wheels equipped with roller bearings.
14" x 14" tight and loose pulleys or single pulley for belt drive to motor, or direct connected to motor.
15 ft. beam will drill to 13' 6" center.
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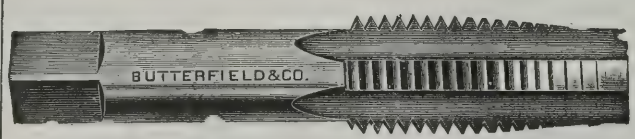
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always do their work well. They assure both speed and accuracy, being made from the highest grade of tool steel, and always absolutely standard in gauge. When you buy taps, look for the name "Butterfield" on the shank. If it's there, you can buy the tool, and put it to work in the complete assurance that it will do its work unfailingly.

MADE IN CANADA BY

Butterfield & Co. Inc.

Rock Island, Quebec

It is stated that the Cockshutt Plow Co. will make extensive additions to their plant at an estimated cost of $100,000. Construction has commenced on an additional storage warehouse and a new experimental building.

The Dominion Steel Products Co. has announced that, on account of objections by Mayor Macbride against the closing of Leonard Street for a large extension of the company's plant, the firm has decided not to go on with the contemplated work.

Chatham.—The springs building at the plant of the Dowsley Spring & Axle Works was gutted by fire on September 11, with a loss of over $50,000. The building was a one-storey brick structure, 400 feet long. It will be restored at once and a contract has been let for the purpose.

Dundas.—Alexander Motherwell of Canada, Ltd., are making extensive improvements and enlargements to their plant. Two large grain storage bins are being constructed to the rear of the plant and considerable new machinery is being installed. Enlarged capacity of plant, ten cars per day.

Dunnville.—Canadian Engines, Ltd., manufacturers of stationary and portable gas and gasoline engines, grain grinders and saw frames, who were practically closed down during the war, have resumed operations and are taking on a full complement of men.

Fergus.—Beatty Bros., Limited, manufacturers of barn equipment, plan extensions to their factory to cost around $35,000.

Ford City.—The Imperial Oil Company's new distributing plant is almost completed. From this plant practically the whole of the western peninsula of Ontario will be supplied with oil.

Fort Frances.—It is stated that negotiations are under way for the establishment of a plant by the International Insulation Company.

Galt.—A branch factory for the manufacture of ladies' and girls' coats, under the name of the York Manufacturing Co., has been located here by Mr. A. Goldhamer, of Toronto. Machines have been installed in the loft of the Buchanan Block on Mill Square.

Goderich.—The Convertible Tractor Corporation, of St. Paul, Minn., contemplate the erection here of a plant for the manufacture of their tractor attachments.

Guelph.—Contracts have been let recently for additions costing $40,020 and $50,000, respectively, to the factories of the International Malleable Iron Co., Limited, and the Guelph Worsted & Spinning Co.

Hamilton.—In connection with the erection of a plant for Poitts & Spencer, Limited, contracts have been let for the construction of one four-storey reinforced concrete factory, 56 x 146 ft.; three buildings, 63 x 362 ft., 123 x 144 ft. and 81 x 62 ft., respectively, and an office building 62 x 45 ft.

The T. Eaton Co. are ereting a factory building costing $100,000 on Hughson Street North. A $15,000 building is being put up by the Smart-Turner Machine Co.

Contracts have been let for a $27,500 addition to the factory of the Frost Steel & Wire Co., Limited; a $12,000 addition to the plant of the Burlington Steel Co., Limited; an $8,000 addition to the factory of Meakins & Sons, and a $23,000 addition to the factory of the Dominion Sheet Metal Co., Limited.

Kitchener.—Permit for the erection of a two-storey felt factory, 100 x 145 feet, has been granted to the Ames-Holden Company.

A B. Pollock Mfg. Co. will build an extension to their plant.

The Lang Tanning Co. will erect two warehouses at an estimated cost of $24,000.

Negotiations are under way between W. N. McEachern and Sons, Ltd., house builders, and a number of manufacturers in this city to have from twenty to thirty houses built this fall in each of the five wards of the city.

Mimico.—As a result of a series of conferences between the Goodyear Tire and Rubber Co. and the Mimico Housing Commission, twenty new brick houses will be built under the provincial scheme on Murrie Street, and tenders will be called for immediately. The launching of a more comprehensive programme along similar lines is being contemplated for 1920.

Midland.—The Midland Whitewear and Costume Co. contemplates additions to factory and installation of new machinery.

Niagara Falls.—Contracts have been let for a $60,000 factory for the Niagara Wire Weaving Company.

Orillia.—The head office of Carriage Factories, Limited, which has been located for some time in Toronto, has been moved here and is now to be found in the Tudhope Carriage Co.'s building.

Oshawa.—About a mile of new sidings will be built to furnish shipping facilities for General Motors of Canada, Ltd.

A plant may be established here by the Ibex Tire & Rubber Co. of Canada, Limited.

The Pedlar People, Limited, are adding five new buildings to their plant, these being of steel construction with brick walls and concrete floors.

Owen Sound.—Lee's Mattresses & Cotton Products Co. is the name of a new company which starts operation in October. The company will make a full line of mattresses, awnings and tents and later will turn out re-covers for auto tops. The plant will be located in the two upper flats of David Rutherford's carriage works and will start in a small way. Messrs. Charles and Percy Lee are the promoters.

Petrolea.—The Board of Trade, assisted by Mr. E. Hyatt, has succeeded in getting another industry. Mr. Frank A. Halstead, of Port Huron, has purchased the Stevenson boiler works, and will remodel it for the manufacture of soaps and greases. The concern will employ 25 to 40 hands.

Renfrew.—The Renfrew Refrigerator Co. will construct immediately new additions which will double their present floor space.

St. Thomas.—The St. Thomas Cabinets, Ltd., will establish a factory to manufacture gramaphone cabinets.

Sarnia.—The Sarnia Woollen Mills Co. propose to erect a store and office building at a cost of $15,000.

The International Bushings Co., of which C. E. Calvert, Toronto, is president, will erect a plant in the near future.

The Loughead Machine Shop here has been purchased by the Seagrave, Ltd., manufacturers of motor trucks and firefighting apparatus. The new concern, which has several establishments



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Sailings 20th of each month.

All steamers fitted with refrigerators for the carriage of perishable freight.

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Marine Insurance effected at rates equal to those given from New York.

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LIMITED
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in the United States and Canada, will be capitalized at $200,000, one-quarter of which will be open to local investors.

Toronto.—The Anchor Cap Company, Brooklyn, have commenced construction of a factory on Wallace Avenue, at an estimated cost of $45,000.

The Quaker Candy Co. have obtained a permit for an addition to their factory at 420 Queen Street.

The Toronto Wool Scouring Co., Limited, have recently removed their plant from Lake Street to the former Reinhardt Brewery Building on Dundas Street at the Don. The new quarters afford greatly increased production, the capacity being 15,000 lbs. of wool per day.

The Canadian John Wood Manufacturing Co., Limited, which purchased a plant on Hillingdon Avenue, adjoining the Grand Trunk Railway, expects to start production this month. The company will manufacture all types of welded steel tanks and containers by both the electric and oxy-acetylene method.

A factory and warehouse costing a quarter of a million dollars are being erected by the Northern Aluminum Co., Limited, 158 Sterling Road.

An extension to their present plant in Weston is being made by the Canada Cycle and Motor Co.

The Sunbeam Chemical Co. of Canada, Limited, a branch of the Sunbeam Chemical Co., Chicago, are opening a plant at the corner of Lombard and Jarvis Streets for the manufacture of dyes, dye products and disinfectants and will employ forty hands.

Trenton.—Repairs are to go ahead to the Cold Storage Building to put it into shape for a paint factory. It is proposed to manufacture from the ore found in Ontario, and will include the full process of crushing, grinding and mixing. E. James and W. W. Young, negotiating with an established paint concern at Montreal, are the interested parties.

Walkerville.—Contracts have been let for a $65,000 branch plant for the American Auto Trimming Co., Detroit, and for two additions costing $500,000 for the Peabody Sales Corporation, Limited..

Windsor.—The Peninsular Machine Co. and the Helbring-Wright Chemical Co. of Detroit, plan to establish branch plants here.

The Fisher Body Co., Detroit, will build a five-storey factory for the manufacture of closed automobile bodies, which will employ 200 men when completed. The company has a plant at Walkerville, Ont., where it manufactures open automobile bodies. The new plant will cost $350,000. A by-law has been passed granting a ten-year fixed assessment of $10,000.

The Champion Spark Plug Co. of Canada is erecting a $60,000 extension to its plant.

Brantford.—The latest local industry to announce an extension is the Brantford Oven & Rack Co., which will double its plant, owing to increased demand for its output.

PRINCE EDWARD ISLAND.

Charlottetown.—Bruce, Stewart & Co., Limited, have let the contract for a new machine shop.

QUEBEC.

Calumet.—The North American Magnesite Company, Limited, have let contracts for a plant to cost $100,000.

Grand Mere.—The Laurentide Co. have decided to install three more grinder units, each consisting of one 2,800 horse-power motor directly connected to two magazine grinders. The ground wood building will be extended for the purpose. The new grinders will increase the capacity of the groundwood department to a total of about 400 tons, air-dry weight, of groundwood pulp per day.

Montreal.—An addition to the plant of the National Breweries, Limited, will be erected at a cost of $450,000.

Bovril, Limited, 27 St. Peter Street, plans the erection of a factory.

Tooke Bros., Limited, are erecting an addition to their factory at 302 De Courcelles Street..

Contract has been let for a $50,000 factory for the Anglo-Canadian Wire Works, Limited.

B. J. Coglin Co., Limited, 2050 Ontario Street, plan the erection of an addition to their plant. .

Additions to mills and bins at a cost of $160,000 are being made by Dominion Flour Mills, 302 St. Ambroise Street.

The Montreal Locomotive Works are erecting several additional buildings at their plant at Longue Pointe.

Quebec.—Contracts have been let for a $35,000 extension to the factory of John Ritchie Co., Limited, 496 St.. Valier Street, and $20,000 factory for Imperial Tobacco Co. of Canada.

St. Johns.—Plans have been prepared for an addition to the plant of the Belding Paul Corticelli, Limited.

Sherbrooke.—A factory costing $240,000 will be erected by Julius Kayser & Co., Frontenac Street.

The Connecticut Cotton Co. have under consideration the erection of an addition to their plant..

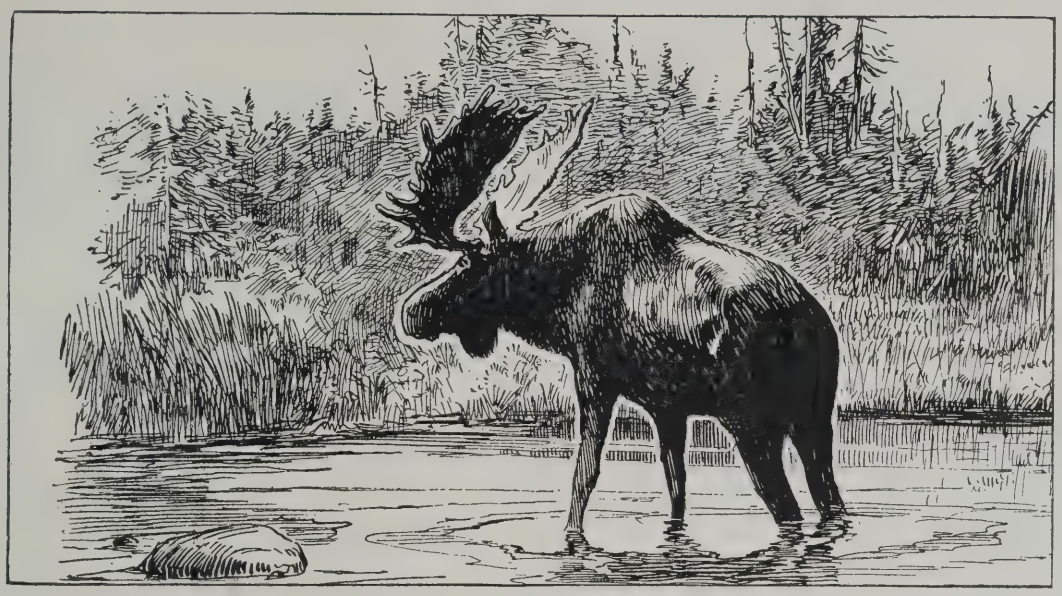
Three Rivers.—A large plant will be erected here by the Lava Cement, Clay and Silicate Products Co.

The International Paper Co., Ltd., is erecting a plant, consisting of eighteen buildings. Total estimated cost, $6,000,000.

SASKATCHEWAN.

Moose Jaw.—The Robin Hood Mills have let the contract for an office building to be erected on High St. and Fifth Ave. West. The building will be 40 by 80 feet, three storeys with basement.

CANADIAN COLLAPSIBLE TUBE CO., Limited
MANUFACTURERS OF
"Premier" Pure Tin, Plain and Decorated Collapsible Tubes
111 RICHMOND ST. WEST - - - TORONTO



The Call of The Open

WHEN the days begin to have that unmistakable fall "tang"---when you shiver more than a trifle if you leave your coat home nights---when the leaves are turning brown quicker than you can watch them---right then you feel that impulse to climb into that old khaki suit, to pull on those old knee boots, and to fondle that fine little old rifle---

AND to get up north where the big fellows are---moose, deer, caribou and bear, at your choice according to locality. Why not? The backwoods of Ontario are calling you to a real fall hunter's holiday.

AND it's so simple to get there. The Canadian Pacific takes you to all the best hunting country in Ontario. Ask any Canadian Pacific agent, or

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CANADIAN PACIFIC RAILWAY
1 KING STREET EAST, TORONTO

The Canadian Wood Turpentine—made at our mills at LaTuque, P. Q., is an excellent diluent and solvent and contains no free rosin.

Further information will gladly be sent upon request.

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Sales Office: *Portland, Maine, U. S. A.*

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Steel Waste Paper Basket

Steel Shop Boxes, Foundry Boxes' Shelf Boxes, Shop Barrels, Stools' Oily Waste Cans, Garbage Cans

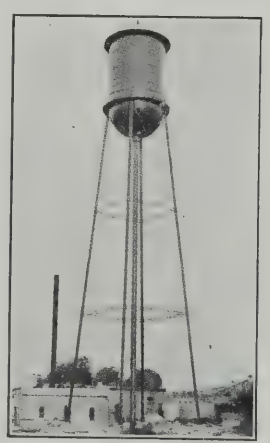
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Write our nearest sales office to-day for prices, plans and specifications. Our catalogue No. 25 gladly mailed to you, upon request.

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Issues Policies of Insurance after a Careful Inspection of the Boilers Covering Loss or Damage to Property and Loss Resulting from Loss of Life and Personal Injuries. Policies Guaranteed by The Hartford Steam Boiler Inspection and Insurance Company.

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JAMES P. BYRNE . . . . . Secretary
M. B. ROBINSON . . . . . Asst. Secretary

Recent Trade Enquiries

A List of Enquiries Received from Various Sources including the Canadian Trade Mission, London; the Canadian Trade Commission, Ottawa; the Department of Trade and Commerce, Ottawa; and the Commercial Intelligence Department, C.M.A., Toronto.

137. Reconstruction.—A firm with reliable business references has been established in Manchester for the purpose of representing Canadian interests in Europe. They have on their staff fully qualified engineers, travellers, and salesmen, and are regularly going back and forward to the continent for the purpose of securing contracts for reconstruction work.

138. Pianos, Organs, etc.—A Glasgow importer asks to be placed in touch with exporters of the above.

139. Bolts and Nuts.—A Glosgow firm asks to be placed in touch with exporters of the above.

140. Wire Nails.—A Glasgow firm asks to be placed in touch with exporters of the above.

141. Kraft Brown Papers.—A Glasgow firm asks to be placed in touch with exporters of the above.

142. England.—A London firm in a position to sell large quantities of chocolates of all kinds, and cocoa, wish to get into touch with Canadian manufacturers able to fill orders.

143. Metal and Engineering lines, Foodstuffs, Chemicals, etc.—A London firm of importers and exporters, with branches in China, India, and the United States, who are mainly interested in metal manufactures, machinery, railway equipment, and engineering supplies, but also maintain a department for handling foodstuffs, chemicals, and raw materials, would be glad to hear from Canadian manufacturers and shippers seeking export connections. A full list of articles and terms, conditions, etc., is on file at the Department of Trade and Commerce.

144. England.—A jam manufacturing company in the South of England is open to purchase raspberry and strawberry pulp in barrels, and invites offers from Canadian packers experienced in this trade.

145. England.—A manufacturers' agent is desirous of fixing up sole commission agencies for this country with Canadian manufacturers of confectionery, biscuits, and grocers' sundries.

146. Foodstuffs.—A firm in Scotland is open for several agencies for Canadian manufacturers of foodstuffs.

147. Tramways and Light Railways.—A correspondent in London is anxious to get in touch with a few Canadian firms for such materials who are not already represented on this side.

148. England.—A London firm possessing a selling organization among the wholesale trade throughout the United Kingdom, desire the representation of Canadian manufacturers of woollen piece goods, (suitings, serges, costume, cheviots, tweeds, etc.), hosiery, underwear, knitted goods, woollen and silk jerseys and sweaters; also gloves.

149. Hosiery.—A London firm already representing a Canadian manufacturer, desires the agency, upon a commission basis, of Canadian manufacturers of hosiery lines, i.e., women's stockings, men's half hose, and children's socks and three-quarter hose, in wool, cotton, lisle, and artificial silk. Canadian reference.

150. England.—A London company which claims a connection among shipbuilders, is desirous of securing the agency of Canadian manufacturers of goods suitable for this trade, including: bolts and nuts, chains, cables, ships' brass work, iron, steel, brass and copper tubes, copper and brass wire, wire ropes, sheet steel, railway material, locomotives, waggons, carriages, rails, cast iron pipes, semi-rotary pumps.

151. Electric welding wire.—A Midlands firm of manufacturers are open to purchase steel electric welding wire (size No. 2, No. 4 and 5-16 in.) and invite offers from Canadian manufacturers.

152. Cuba.—An agent in Havana who is closely connected with the principal importers and merchants and whose salesmen cover the entire island of Cuba is desirous of getting in touch with firms who might be interested in securing representation there. This gentleman states that there is a large demand in Cuba for the following Canadian goods: cheese, codfish, crystallized fruits, canned goods, paper, glassware, and chemical products. References are good.

153. Italy.—A correspondent is anxious for Canadian manufacturers to send catalogues of the following: electrical articles, machinery, electric railway supplies, high tension transport lines, etc.

154. Greece.—A firm in Salonica is interested in foodstuffs in general, as well as in chemical products and dyestuffs.

155. Agency.—A buyer in Amsterdam is desirous of getting into communication with Canadian fruit driers, especially driers of apples.

Canadian National Railways

SERVE ALL CANADA

Lines of the C.N.R. traverse every province in the Dominion. They serve most important points, reach direct every seaport with the exception of one in Northern British Columbia. Therefore

Why Not Ship Canadian National?

Next time you have a consignment going out, instruct your shipper to route it over your own line, the C.N.R.

Get the "National" Idea

Canadian National Railways

Principal Agencies:—Halifax, N.S.; Moncton, N.B.; St. John, N.B.; Charlottetown, P.E.I.; Quebec, Que.; Montreal, Que.; Ottawa, Ont.; Toronto, Ont.; Port Arthur, Ont.; Winnipeg, Man.; Regina, Sask.; Saskatoon, Sask.; Prince Albert, Sask.; Edmonton, Alta.; Calgary, Alta.; Kamloops, B.C.; New Westminster, B.C.; Vancouver, B.C.; Victoria, B.C.

156. Spain.—A firm with branches in Milan and Brussels expects to open an office in Barcelona, Spain, and are desirous of getting in touch with manufacturers contemplating export to Europe. They are interested in the following articles: shoes, automobiles, trucks, silk hosiery, machinery, and automobile tires.

157. Agency.—An agent, who is well and favorably acquainted with the wholesale trade and its requirements, is desirous of securing agencies from reliable manufacturers and dealers in food products and kindred lines. He is prepared to sell goods on a commission basis.

158. Italy.—A firm in Cirenaica wishes to get in touch with important Canadian dealers in sugar and flour.

159. Trinidad and Demerara.—An agent with twenty years' experience of the West Indian trade and who has for the past six years acted very successfully as selling agent for several well-known British and American houses, wishes to act for Canadian manufacturers of manufactured iron goods, in fact, all light and heavy hardware goods. There is a growing demand for Canadian goods in this market.

160. Food Products.—A young man of good education, just returned from three years' overseas service, is desirous of representing Canadian manufacturers of jams, marmalades, biscuits, canned fruits and condensed milk in the United States or England. He has considerable selling experience and is quite prepared to undertake any reasonable proposition that will give him the opportunity of introducing Canadian goods in foreign markets. His references are good.

161. England.—A London firm of wholesale and manufacturing confectioners would be glad to receive offers of chocolates and other confectionery from Canadian manufacturers.

162. Doors.—A Liverpool firm of builders' merchants, who expect to have large requirements of imported doors early next year, ask to be placed in touch with exporters.

163. Halifax.—A firm in Halifax asks to be placed in touch with exporters of annealed No. 14 wire for re-drawing.

164. Hickory Squares.—A West Hartlepool firm makes inquiry for hickory squares 45 in. by ⅞ in. by ⅞ in., and 42 in. by ⅞ in. by ⅞ in.

165. Dowels.—A West Hartlepool firm makes inquiry for birch and maple dowels 12 in. rising by 6 in. lengths to 72 in., and in diameter 3-16 in. rising by 1-16 in. to 1 in.

166. Wire.—A Warrington firm asks for quotations on the following classes of wires in 50 to 100 ton lots: Netting weaving wires, 19 to 22½ S. W. G., tinned mattress wire 22½ to 24 S.W.G., hard drawn wire from 6 to 12 S.W.G.

167. England.—A Liverpool firm asks to be placed in touch with exporters of the above.

168. Wire Rods.—A Lancashire firm ask for quotations on open hearth basis wire rods .50 per cent., .60 per cent. carbon, in 5 or 6 standard gauge, which is .212 in., or .192 in. diameter, in coils of not less than 120 lbs.

169. Tinned Wire.—A Warrington firm asks to be placed in touch with exporters of tinned bottling and mattress wire.

170. Belgium.—A Belgian company which are large and regular buyers of counter-veneered three-ply birchwood panels and other veneers, would be glad to negotiate with Canadian manufacturers who can supply what is required. Sample and specifications available at the Department of Trade and Commerce.

Moving to Japan

Breweries Located in British Columbia Are Being Transferred Across the Pacific

According to *Industrial Progress* of Vancouver, machinery is being removed from the plants of the old Vancouver Breweries Company, Vancouver, and the Union Brewing Company, Nanaimo, to be shipped immediately to Japan for use in a big brewery that will be erected there shortly with Canadian and Japanese capital. The new company in Japan, known as the Anglo-Japanese Brewing Company, has been organized with a paid-up capital of $1,000,000. Mr. George Reifel, son of Mr. Henry Reifel, head of the British Columbia Breweries, formed the concern after a year's residence at Tokyo. The plant will be located between Tokyo and Yokohama, and will manufacture principally for export to Calcutta, Singapore, Bombay and other Far Eastern points. The capacity of the plant will be 3,000,000 gallons annually.

HON. FINLAY G. MACDIARMID,
Minister of Public Works

W. A. RIDDELL, M.A., Ph.D.,
Superintendent

TRADES AND LABOUR BRANCH
DEPARTMENT OF PUBLIC WORKS

THE TRADES AND LABOUR BRANCH administers the following:

The Trades and Labour Branch Act
The Bureau of Labour Act
The Stationary and Hoisting Engineers Act
The Building Trades Protection Act
The Factory, Shop and Office Building Act
The Steam Boiler Act
Employment Bureaus
Investigation and Research

Employment offices are in operation in 35 cities and towns of the Province, and are the Ontario units of the recently organized "Employment Service of Canada."

Are you getting your help through the medium of the employment service, which you as a taxpayer are helping to support?

The value of these bureaus will increase in proportion to the extent to which they are used by employers.

NOTICE TO STEAM USERS:

At the last Session of the Legislature, the Act respecting Stationary and Hoisting Engineers was amended, said amendment requires that on and after January the 1st, 1920, all stationary steam plants in the Province of Ontario must be registered with the Board of Stationary and Hoisting Engineers. Application forms for this purpose will be forwarded on request. The boiler horsepower and other information contained in these application forms is to be used for statistical purposes.

A Registration Certificate will be issued to each applicant.

W. C. McGHIE,
Chairman of Board
15 Queen's Park, Toronto

INDUSTRIAL CANADA

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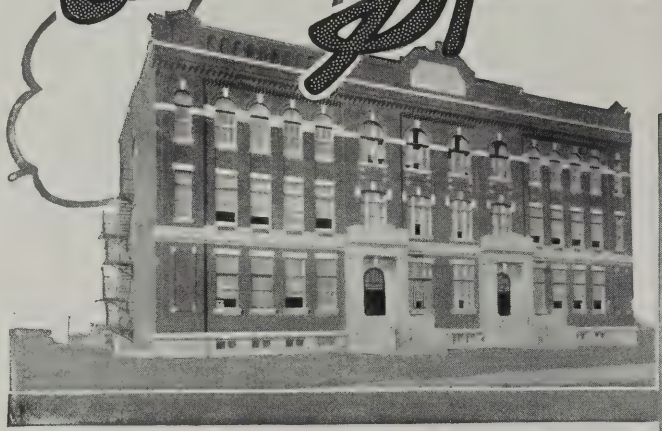
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Barrett Specification Roofs



20-year Barrett Specification Roof on St. Marc's School, Montreal, Owners: Catholic School Board, Montreal. Architects: Vautrin & Bernier, Montreal. Gen. Cont.: Ulric Boileau, Limited, Montreal. Roofers: Canada Roofing & Paving Company, Montreal.



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The *modern* way to buy a roof—

When the two school buildings shown above were completed, we handed their owners, the Catholic School Board of Montreal, Surety Bonds which *guarantee* the roofs against trouble or maintenance expense for a period of *20 years.*

The probabilities are that these roofs will last for nearer 30 *years* without attention.

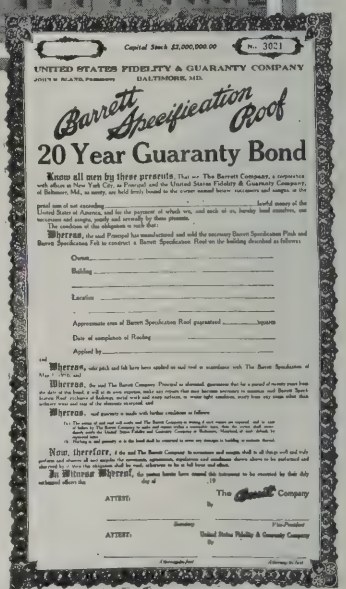
This is the *modern* way of buying a roof, not merely purchasing so many square feet of roof at so much per square foot, but investing in a long and definite period of *guaranteed service.*

The Barrett Specification first made it possible for building owners everywhere to obtain, through their local contractors, *a standardized roof* built according to the most scientific principles of roof construction.

Guarantee 20 Years of Service

Now we offer to go a step further and actually *guarantee* a Barrett Specification Roof *for a period of at least 20 years.*

This guarantee, obtainable on any roof of 50 squares or more, in any town of 25,000 or over, and in smaller places where our Inspection Service is available, is in the form of a Surety Bond, issued by a well-known fidelity company.



UNITED STATES FIDELITY & GUARANTY COMPANY
JOHN M. GLOYD, PRESIDENT BALTIMORE, MD.

Barrett Specification Roof

20 Year Guaranty Bond

Know all men by these presents, That we, The Barrett Company, a corporation with offices at New York City, as Principal and the United States Fidelity & Guaranty Company, of Baltimore, Md., as surety, are held and bound to the owner named herein, successors and assigns, in the penal sum of not exceeding ... lawful money of the United States of America, and for the payment of which we, and each of us, hereby bind ourselves, our successors and assigns, jointly and severally by these presents.

The condition of the obligation is such that:

Whereas, the said Principal has manufactured and sold the necessary Barrett Specification Pitch and Barrett Specification Felt to construct a Barrett Specification Roof on the building described as follows:

Owner ...
Building ...
Location ...
Approximate area of Barrett Specification Roof guaranteed ... square
Date of completion of Roofing ...
Applied by ...

and

Whereas, said pitch and felt have been applied on said roof in accordance with The Barrett Specification of May 1, 1916; and

Whereas, the said The Barrett Company Principal as aforesaid, guarantees that for a period of twenty years from the date of the bond, it will at its own expense, make any repairs that may become necessary to maintain said Barrett Specification Roof exclusive of flashings, metal work and coping surfaces, in water tight condition, made from any cause other than ordinary wear and tear of the elements excepted; and

Whereas, said guaranty is made with further conditions as follows:

1st. The owner of said roof will notify said The Barrett Company in writing if such repairs are required, and in case of his failure to do so, this bond shall be void; and 2nd. The owner of said roof will keep a contract in force at all times with the United States Fidelity and Guaranty Company of Baltimore, Maryland, or such other Company as approved by ...

Now, therefore, if the said The Barrett Company its successors and assigns shall in all things well and truly perform and observe all and singular the covenants, agreements, stipulations and conditions above shown to be performed and observed by it upon the assignment shall be void, otherwise to be in full force and effect.

In Witness Whereof, the corporate seals have caused this instrument to be executed by their duly authorized officers this ... day of ... 19...

ATTEST: The Barrett Company
By ...
Secretary Vice-President

ATTEST: United States Fidelity & Guaranty Company
By ...

This is the bond that guarantees your roof for 20 years.

To obtain the Bond you have only to insert in your building specifications the following:

"The roof shall be laid according to The Barrett Specification dated May 1, 1916, and the roofing contractor shall secure for me (or us) the 20 - Year Guaranty Bond therein mentioned."

The guarantee costs you nothing. We merely require an opportunity to send our Inspectors to watch the job during construction.

You get a roof that will cost less per year of service than any other type of permanent roof, and that takes the base rate of insurance. We get the satisfaction of knowing that our materials are creditably used.

We should be very glad to send you further details and copy of the Barrett 20-Year Specification, with diagrams, ready for insertion in your building plans.

The Barrett Company LIMITED

MONTREAL TORONTO WINNIPEG VANCOUVER ST. JOHN, N.B. HALIFAX, N.S. SYDNEY, N.S.

Industrial Canada

ISSUED BY

The Canadian Manufacturers Association
INCORPORATED

Vol. XX. TORONTO, NOVEMBER, 1919 No. 7

Editorial Comment

A Tariff Board

THE experience of the United States in creating a Tariff Commission should encourage Canada to follow the example set. Since the creation of the Tariff Commission in the United States, questions relating to the tariff seem to have almost disappeared from the controversies of politics. Fiscal questions are studied by this body in a disinterested and detached manner. All the facts bearing on each question are assembled and the decision is made with reference to the best interests of all classes in the country. Such a procedure must tend to produce economic stability, which is of the greatest possible advantage to trade and commerce. The Canadian Government should appoint a permanent tariff board to act in an advisory capacity to the Government. This board should make a scientific study of the Canadian customs tariff and also the tariffs of other countries with which Canada trades. It should familiarize itself with cost of production and other factors affecting manufacturing. Much depends upon the personnel of such a board, but if the right men are selected, they, with all the facts before them, should be able to frame such a tariff as will safeguard the best interests of the country.

The Victory Loan

THERE is little use in advancing arguments why Canada should do something which must be done. Canadians have no option about supporting the Victory Loan of 1919. Expenditures have already been incurred and must be met. It is better to borrow from our own people than from abroad. One of the questions which is asked is, "What was done with the last Victory Loan?" The Victory Loan Committee have issued a circular explaining very concisely how the last loan was spent. The 1918 loan amounted to $610,000,000. Of this amount $312,900,000, or 51.3 per cent. was paid for war and demobilization expenses in Canada; $59,000,000, or 9.7 per cent. was paid for war service gratuities. These two items account for three-fifths of the total loan. The sum of $207,750,000, or 34 per cent. of the total, was advanced to Great Britain and her Allies for the purchase of Canadian wheat and other foodstuffs; $9,000,000 was advanced to Great Britain for the purchase in Canada of the salmon pack; $8,400,000 was advanced to Great Britain for imperial shipbuilding and sundry accounts, and for interest on loans made Great Britain for munitions bought in Canada; $3,950,000 was advanced to the Allies for the purchase of Canadian raw materials and manufactures; $9,000,000 was voted to the Halifax Relief Fund. Every dollar of the 1918 Victory Loan was spent in Canada and every dollar of the 1919 Victory Loan will be spent in Canada.

Transportation for Prince Edward Island

WHEN Prince Edward Island entered Confederation the Province was promised continuous and adequate communication with the mainland. That promise has never been fulfilled to the satisfaction of the Islanders. Up to a few years ago, the transportation system of Prince Edward Island and connection with the mainland was inadequate and unsatisfactory and the Islanders had sufficient cause for complaint. While millions of dollars were being wasted on railway enterprises in other parts of Canada which have not yet begun to pay a return on the cost of construction, one of the oldest Provinces, which is a most fertile country and completely settled, was unjustly treated in the matter of transportation.

During the past few years the Dominion Government has gone a considerable distance in remedying this unfortunate state of affairs. A splendid car ferry and ice breaker was constructed to operate across the Straits of Northumberland between Cape Tormentine and Borden Extensive breakwaters and landing docks were built, and the old narrow gauge road on the Island was standardized from Borden to Charlottetown. While this action has greatly improved the situation it is still far from being entirely satisfactory. In the event of the car ferry being laid up for repairs, Prince Edward Island will be temporarily isolated from the mainland. The people of Prince Edward Island claim that a second car ferry should be put into operation to insure the continuous and adequate service to which they are entitled. It seems an extraordinary thing that a hundred thousand people of British

descent, inhabitating one of the oldest Provinces of Canada, should be denied a proper transportation service, in view of the fact that millions have been spent on providing transportation for aliens who have been distributed through some of the more inaccessible parts of Canada. The people of Prince Edward Island have long had a grievance on this transportation question against the rest of the people of Canada, and this should be remedied to their complete satisfaction without further delay.

Super Commissions

THERE is now pending before the United States Senate a bill which is designed to establish a Federal Industrial Relations Commission. Employers in the United States believe that this Bill would give the Commission wide powers over the conduct of industry, including such questions as the length of hours, the amount of wages, output and collective bargaining. The avowed object of the Bill is to try to prevent industrial disputes, strikes and lock-outs. The experience of employers in the United States in relation to various Commissions dealing with such matters is probably very similar to that of employers in Canada. During the war, the various arbitration and conciliation boards kept labor satisfied, chiefly by giving them nearly all they asked for. It is easy enough to arbitrate industrial disputes if this method is followed. It is the simplest method for a commission which desires to achieve temporary popularity. If the experience of the past is any guide, employers will anticipate that when they and employees appear before a commission possessing anything like final powers, disputes will be settled by their being forced to yield. The majority of "settlements" will simply mean that the employers give up something. Employers have learned by bitter experience how unreliable is the third, or presumably disinterested party, in a commission. Instead of being a non-partisan, fair-minded and able judge, he is too often a political appointee who promptly sides with the employees and becomes their advocate rather than their judge. When the employers are forced to deliver themselves into the hands of a super-commission which can decide arbitrarily how business should be conducted, there appears to be little difference between that position and the direct control of industry by the Government.

Germany and the Rate of Exchange

REPORTS coming out of Germany indicate that Germany has thrown over the doctrines of Karl Marx. Most of the false economic thinking which is prevalent at the present time can be traced to the pernicious teachings of this German socialist. The Marxian school of political economy emphasize class distinction, preaches the doctrine of restricted output and the control of industry by workers without regard to their qualifications. These doctrines spread over the world and secured a following in most civilized countries. After the armistice in Germany they were tried out to some extent and failed utterly. The Germans, who are above all things a practical people, now realize that the only way they can survive the catastrophe which has overtaken them is to work harder than they have ever worked before. Consequently, they have thrown over the eight-hour day, restriction of output, unreasonably high wages and other false economic doctrines. They have determined to produce goods in vast quantities as cheaply as possible and to throw them on the markets of other countries. They believe that this is the only way they can pay their huge debt and keep their nation as a seperate entity.

The present condition of exchange is helping them, especially in regard to those articles for which they have the raw material within their own boundaries. They sell to Great Britain and are paid in sterling which has not depreciated to any extent in comparison with the mark in international exchange. They can sell to the United States where the dollar is at a premium. They have an even greater advantage in respect to goods which are based on raw material purchased in Russia where the ruble has depreciated comparatively more than the mark. It is obvious that when Germany buys raw material in Russia, manufactures it in Germany, and sells it in the United States they have a tremendous advantage and benefit to the fullest possible extent from the present abnormal exchange situation. Germans are already boasting that while they have lost the war they have won the peace.

Industrial Conference—United States

AT the time of writing the labor delegates have withdrawn from the Industrial Conference which was summoned by President Wilson at Washington on October 6th. This Conference consisted of representatives from the following three groups: capital, labor and the public. The labor delegates withdrew because the Conference would not adopt their resolution on collective bargaining which involved the recognition of trade unions and collective bargaining and, according to the delegates of the employers, meant the establishment of the closed shop.

At the National Industrial Conference in Ottawa, the employers and employees differed over the same points, but they agreed to disagree, and placed their respective resolutions covering the points at issue on the records of the Conference. The employers of the United States have taken the same attitude as that taken by the employers at the National Industrial Conference at Ottawa. If industry is to remain free, no other attitude could have been taken by United States employers in the interests of the country as a whole.

Organization of Divisions

THE sixteenth of October is an important date in the history of the Canadian Manufacturers Association. On that date simultaneous meetings were held in Montreal and Toronto for a common purpose. In Montreal, the Quebec Division of the Association was organized. In Toronto, the Ontario Division of the Association was organized. These Divisions under the constitution will deal with matters having an entirely provincial applica-

tion. The formation of the above mentioned Divisions completes the new organization scheme of the Association which was authorized at the last Annual Meeting. The Pacific Division, including the Province of British Columbia, the Prairie Division including the Provinces of Saskatchewan, Alberta and Manitoba, and the Maritime Division, including the Provinces of New Brunswick, Nova Scotia and Prince Edward Island, have already been organized and are in operation. Additional Branches within the territories of the respective Divisions will be organized as quickly as circumstances will permit. Consequently, the Association now has highly centralized machinery for dealing with matters of national importance and in addition has local machinery for dealing with local matters.

The Maritime Provinces

IN the United States the bulk of manufacturing has never shifted far beyond the New England States and New York State. Great cities have sprung up in the centre and west to provide for the needs of a rapidly increasing population, but what might be termed the centre of industrial gravity has remained in the north-eastern section of the United States.

In Canada we find that the centre of industrial gravity is located between Toronto and Windsor, or south-western Ontario. In the United States manufacturing started in the east and spread gradually westward. In Canada, owing to the geographical position of the St. Lawrence River, manufacturing centred in south-western Quebec, developed there gradually, and then shifted to south-western Ontario. Many people believe that the centre of Canadian manufacturing may in time move still farther west, possibly to Winnipeg. Others believe that while manufacturing will greatly develop throughout the whole of western Canada as the population of that part of the country grows, there will be an even greater development in eastern Canada, including Ontario, Quebec, and even more markedly the Maritime Provinces.

These Provinces appear to have nearly all the essentials of a great manufacturing area. They have four magnificent seaports, St. John, Halifax, Sydney and Charlottetown. St. John is the terminus of the Canadian Pacific Railway; Halifax is the terminus of the Canadian Government Railways. The Maritime Provinces are the logical location for industries exporting to Europe, the Eastern States, the West Indies and part of South America. The Maritime Provinces are especially fortunate in their population, which is nearly all of British and French descent. The standard of education and living is high and the best educational facilities are available. There is no better material anywhere for apprentices than in the Maritime Provinces.

The Maritime Provinces possess nearly all the great basic materials for manufacturing. They have coal and iron in close proximity. They have great stores of timber and their farms produce cheap and abundant food for an industrial population. Up to the present they have lacked one thing, namely, cheap power, but committees are now investigating the possibility of remedying this defect with a fair hope of success. Possessing all these advantages, is it unreasonable to expect that some day the Maritime Provinces may stand in the relative industrial position to the rest of Canada that the New England and New York States stand in regard to the rest of the United States?

The Metric System

THE advocates of the metric system have been making determined efforts to secure the adoption of their system in English-speaking countries.

The British Committee on Commercial and Industrial Policy after the War carefully investigated the system and reported as follows:

> "We are not convinced that the metric system is upon the whole even theoretically superior to the British system, and we are satisfied that the practical objections to the proposed change are such as to decisively outweigh any advantages which are claimed for it."

The National Association of Manufacturers of the United States at their Annual Meeting on May 20th, 1919, in New York, endorsed the finding of the British Committee. The Canadian Manufacturers Association at its Annual Convention on June 12th, 1919, approved of the stand taken by the National Association of the United States in endorsing the British Committee's findings.

Consequently, it would appear that there is little chance of the old and tried British system of weights and measures being replaced by the metrical system.

Imperial Preferential Tariffs

CANADA was the first country to adopt the principle of granting a preferential tariff to other countries within the British Empire. At the present time, the British tariff preferences provided by the Dominion of Canada are more extensive than the preferences provided in the fiscal policy of any other British country. It is hoped that the Government will do all in its power to secure the adoption throughout the Empire of substantial customs preferences for British products corresponding to the preferences now provided in the customs tariff of Canada.

The Closed Shop

THE closed shop was first applied on a national scale in the British Isles. All attempts to apply it in a national way to industry have failed on the North American Continent.

The chief reason for this is that the conditions in Great Britain are entirely different from the conditions in North America. In Great Britain there has been for many years a surplus of population. Consequently, the great fear of the wage-earning classes is that there would not be enough work to go round. Further, they argued that the work available should be divided up. They felt that the most effective way to accomplish this purpose would be to close up the shops and exclude all who were

Membership Campaign Week

A great national campaign to secure additional members for the Canadian Manufacturers Association will be held during the week December 1st to December 6th. The slogan of the campaign is "ONE HUNDRED PER CENT. MEMBERSHIP IN EVERY CITY, TOWN AND VILLAGE." Remembering President Howard's appeal at the last Annual Meeting of the Association in Toronto, in June, for each present member to secure one new member this year, when you receive further details of the organization of your division will you please do all you can to make the membership campaign week a success?

not members of trade unions. They also practised the restriction of output.

On the North American Continent the reverse has been the case. Instead of having a surplus of population we have a shortage, and vast sums have been spent to attract immigrants who are necessary to do the constructive work on a new continent. Instead of a shortage of work, this Continent as a rule has not had enough men to do the work which is waiting to be done. Here the workman of yesterday is the employer and capitalist of to-day. He looks forward confidently to the time when he can get into business for himself and secure the rewards of his own initiative in industry. The attempt to apply the old world theory of a closed shop to this Continent cannot succeed because it is opposed to the spirit of freedom and the natural desire of a man to improve his condition in life.

The closed shop tries to limit the number of apprentices in order that those who are already in the trade can keep it to themselves. The closed shop system tends towards an equal wage to the highly skilled and efficient men and the inefficient and unskilled men. This operates severely against the better class of workman. Obviously if a poor workman is getting a dollar a day more than he earns, some better workman will be getting a dollar a day less than he earns. A good workman does not want to be tied to the wage paid to the poorer workman. Moreover, in the closed shop the individual production tends to be fixed by the efforts of the least efficient man in the shop. If a skillful and industrious man works hard in the hope of getting higher wages and promotion, he is quickly told to go more slowly, because the poorer man cannot keep up with him. Broadly speaking, the aim of the closed shop is to give each man in the trade the same amount of money for doing the same limited amount of work. In other words, the poorer men control the better men. In the end the closed shop tends to operate against the welfare of the wage earners themselves. As soon as a shop is closed and a monopoly thereby created, the natural tendency is towards shorter hours, still greater restriction of output and higher wages. The result is the cost of production is increased and the wage-earners, who are also consumers, have to pay more for what they buy. Restriction of output creates scarcity and scarcity increases prices. When goods are produced in great quantities they become cheap and there is no sound way to decrease the cost of living except to increase production so that there will be more goods to divide. Because the closed shop is inimical to individual initiative, to the encouragement of skill, to greater production of goods and to lowering the cost of living, it can never be applied on this Continent in a national way without injury to the whole population.

The Peace Treaty

PART of the gigantic scheme for disseminating socialistic propaganda now operating in civilized countries, is to misinterpret the text of the Labor Features of the Treaty of Peace. For example, the inference is drawn that these Labor Features make obligatory the adoption of an eight-hour day. Further, the eight-hour day is assumed to mean a forty-four hour week. They deduce further that changes are to be brought about by legislation.

There is no expression of opinion in the general principles of the Labor Features of the Treaty of Peace that economic principles should be set aside and that legislation should be substituted for them. The Peace Treaty only speaks of "methods and principles" and even these are to be applied with certain reservations, as the following extracts from the text of the Labor Features of the Treaty of Peace indicate:

"They (the high contracting parties) recognize that differences of climate, habits, and customs of economic opportunity and industrial tradition make strict uniformity in the conditions of labor difficult of immediate attainment. But, holding as they do, that labor should not be regarded merely as an article of commerce, they think that there are methods and principles for regulating labor conditions which all industrial communities should endeavour to apply, so far as their special circumstances will permit."

The high contracting parties have enumerated certain principles which they consider to be of special importance. In connection with the eight-hour day they set forth this principle:

"The adoption of an eight-hour day or a forty-eight-hour week as the standard to be aimed at where it has not already been attained."

Consequently, the Peace Treaty very clearly stipulates that in speaking of an eight-hour day a forty-eight-hour week is meant and not a forty-four-hour week or forty-hour week. They further indicate that they only mentioned the forty-eight-hour week as the "standard to be aimed at." There is no suggestion that even the forty-eight-hour week should be established anywhere by law. Another principle is stated as follows:

"The right of association for all lawful purposes by the employed as well as employers."

The right of association for all lawful purposes is one that is fully admitted by the employers. The Labor Features of the Treaty of Peace, however, do not say anything about "recognition of unions" or "collective bargaining." The general principles set down in these Labor Features of the Treaty of Peace merely indicate an ideal which may be reached through economic evolution in the future.

News and Views of the Association

There will be found each month in this department a record of the various activities of the Canadian Manufacturers Association during the preceding month. The information is supplied to INDUSTRIAL CANADA officially, and all members of the Association are urged to acquire the habit of reading and checking over the contents of the department carefully in order to keep themselves posted on the work of the Association

Executive Council Meeting

A well-attended meeting of the Executive Council was held in the Board Room of the Head Office on Thursday, October 30th, at 2.15 p.m. Mr. J. S. McKinnon, first vice-president, occupied the chair and the usual reports from committees were presented and considered. The Council again voiced its appreciation of the services rendered by Mr. C. H. Carlisle, chairman of the Industrial Relations Committee, and the other manufacturers and officers of the Association who did such good work in connection with the National Industrial Conference at Ottawa.

Annual Meeting, 1920

The Executive Committee of the Association has made a recommendation to the Executive Council that the next Annual Meeting should be held in Western Canada and that the place and date of the meeting should be determined by a committee consisting of the President and General Manager. Early action was suggested so that members could make necessary arrangements to attend.

New Members' Executive Committee

At the meeting of the Executive Council in St. John, on October 1st, Messrs. C. Howard Smith, Howard Smith Paper Mills, Limited, Montreal, and Angus. McLean, Bathurst Lumber Co., Bathurst, N.B., were appointed members of the Executive Committee, in succession to Messrs. John R. Shaw, Canada Furniture Manufacturers, Woodstock, and H. H. Champ, Steel Co. of Canada, Limited, Hamilton, whose term of office had expired.

Prince Edward Island Service

The Transportation Committee at its last meeting gave consideration to the complaints regarding inadequate service to and from Prince Edward Island, which were made by the manufacturers and Board of Trade of Charlottetown during the recent visit there of Association officers. The Committee were of the opinion that the Island was entitled to better service and that the Association should try to help them. The General Manager was therefore requested to take up the question direct with the president of the Canadion National Railways.

Delegates to Conference

In connection with the first International Labor Conference, which was opened in Washington on October 29th, the Association was asked to nominate one person to represent all the employers of Canada and five other persons who would act as his advisers. The Executive Committee at its last meeting considered the selection of the delegate and his advisers and the matter was referred for action to the President and General Manager who selected Mr. S. R. Parsons, British American Oil Co., Toronto, as delegate with Mr. Sam Harris, Harris Lithographing Co., Toronto, and Mr. J. R. Shaw, Canada Furniture Manufacturers, Woodstock, as substitutes. For advisers, Mr. J. E. Walsh, General Manager; Mr. J. T. Stirrett, General Secretary; Mr. E. Blake Robertson, Ottawa Representative; Mr. J. G. Merrick, Secretary Employers Association of Toronto, and Mr. J. B. Hugg, K.C., Winnipeg were named.

Federation of British Industries

Through the good offices of the Canadian Mission in London, England, a reciprocal agreement has been made between the C.M.A., and the Federation of British Industries, a highly organized body which includes nearly all the manufacturing industries in Great Britain and has a membership of over 17,000. Under the arrangement both organizations will enjoy a free interchange of statistics, information and services.

Insurance Department Service

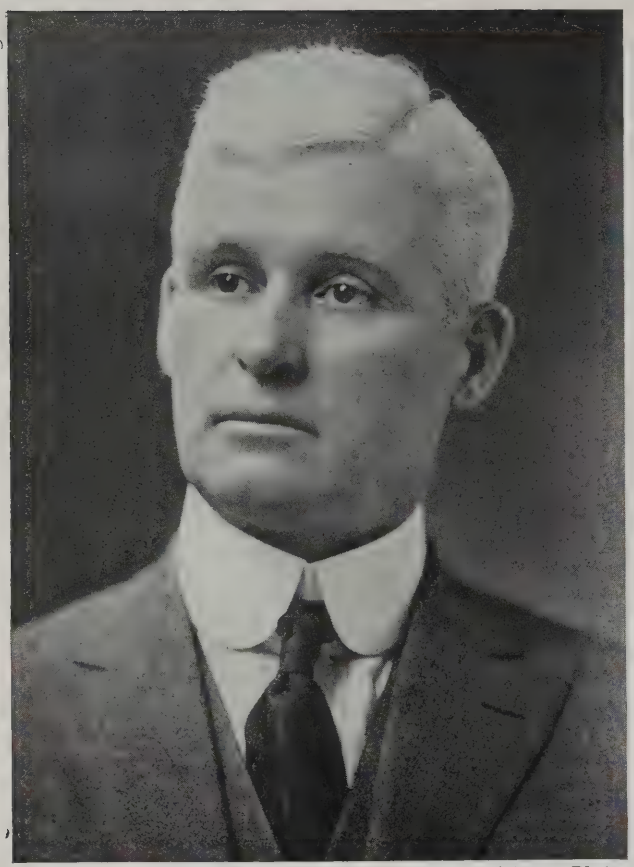
During September the Insurance Department received and dealt with 36 inquiries on the following subjects,—Standing of Companies, 2; examination of policies, 1; sprinkler equipment, 1; policy wordings, 11; rates, 11; building construction, 2; inspection service, 8.

Meat and Canned Food Act

During the recent tour of Association officers and members through the Maritime Provinces, the Canned Fish Section of the Association expressed their dissatisfaction with the amendment to the Meat and Canned Food

Help the Returned Men

Attention of the members of the Canadian Manufacturers Association is directed to the valuable work being done by the Professional and Business Section of the Department of Soldiers Civil Re-establishment in placing men in business positions. The Section, with branches in the principal cities of the Dominion, has a list of returned men qualified to undertake any nature of work in the offices of industrial establishments and, when members are in need of such assistance, they should get in touch with the nearest office of the section and then help to absorb the returned soldiers at present out of employment.



—*International Press Photo.*

Mr. Angus McLean

Chairman of the Maritime Division who has been appointed a member of the Executive Committee. Mr. McLean is head of the Bathurst Lumber Co., Bathurst, N.B.

Act passed in 1917, regulating the sizes of tins of canned lobster. As the entire lobster industry of the Maritime Provinces was seriously affected, the matter was considered to be of such importance that the full services of the Association were extended on behalf of the Section. As a result the Act has been amended by the House of Commons to the entire satisfaction of members concerned.

Board of Commerce

On October 22nd a deputation from the Association interviewed the Government at Ottawa relative to the Board of Commerce. Objections to the present method of procedure adopted by the Board in making its investigations were set forth in detail and the cabinet ministers who heard the deputation promised to give them consideration.

Fire Prevention Day Results

Reporting on the results of the observance of Fire Prevention Day on October 9th last, Mr. E. Grove Smith, Dominion Fire Commissioner, states that:—"As the result of the joint efforts of all organizations, Fire Prevention Day, 1919, was observed in about 26,000 schools, demonstrations, clean-up campaigns and other effective methods were employed by over 300 fire chiefs; 79 municipal councils passed resolutions approving the official observance of the day; special inspections on forms supplied by this office were conducted in over 6,000 factories, warehouses and large properties, and suitable literature was distributed to the employees of these concerns; 785 newspapers carried matter issued by this office and by the provincial fire marshal departments; 423 made editorial mention of the campaign and 64 dailies in the larger cities and towns of each province gave a full page spread on October 8th. Up to date, (Oct. 18th), 735 factories have signified their intention of instituting a permanent monthly inspection system under our direction, and 405 have undertaken to use our leaflets in all employees' pay envelopes during the next twelve months.

"While the tide is at the flood, it is deemed advisable to give some definite direction to the general interest awakened by Fire Prevention Day. To this end it is the intention to visit all the larger cities in Canada and with the co-operation of the provincial fire marshals, hold conventions and organize local committees to carry on the work. An itinerary is being arranged to commence at Victoria, B.C., on November 10th, and conclude in the Maritime Provinces about the middle of December."

Gain in Membership

Since the annual meeting, according to a report submitted to the Executive Council by the Membership Committee, 93 applications for membership have been accepted and 46 resignations received, a net gain of 47. The Committee points out with satisfaction that none of the resignations were submitted through dissatisfaction with the policies or services of the Association but were due to amalgamations, cessation of business operations and similar causes.

Winnipeg Branch Meets

A general meeting of members of the Winnipeg Branch was held on October 6th, when the delegates to the National Industrial Conference at Ottawa made a report upon the proceedings there. The delegates urged that members individually do everything in their power to give effect to the position taken by the employers' delegates at the Conference.

Ontario Insurance Report

The manager of the Insurance Department has recently prepared a detailed analysis of the report of the Ontario Insurance Commission by Hon. Mr. Justice Masten, copies of which have been mailed to all members of the Insurance Committee. The analysis was discussed at the last meeting of the Committee and favourably commented upon. The manager was asked to prepare a second condensed analysis setting forth briefly a summary of what might be considered to be the attitude of the C.M.A., towards Judge Masten's report and this will be submitted to the Executive Council at an early date for approval.

Ontario Division Executive

A meeting of the Executive Committee of the Ontario Division was held in the King Edward Hotel, Toronto, on October 30th, with the following members present:—Messrs. W. C. Coulter, Chairman, Toronto Branch; Geo. Brigden, Thos. Roden, E. J. Freyseng, and W. M. Inglis, Toronto; S. J. Williams, Kitchener; Fred Hatch, Whitby; W. Cowan, Galt; G. S. Rutherford, Amherstburg, and G. C. Cockshutt, Brantford.

In the unavoidable absence of Mr. Geo. H. Douglas, Chairman, Mr. W. C. Coulter presided. The Committee considered the organization of sub-committees for the ensuing year, and directed the Chairman and Secretary to consult with representative manufacturers in the various zones of the province, inviting nominations before final adjustment.

It was unanimously agreed that a representative membership committee should be appointed—one member of

such Committee to be chairman of each district or zone in the province, the campaign to correspond with the general membership campaign of the Association decided upon during the week, December 1st-5th. After the campaign opens on December 1st local Committees will be expected to wire or mail each night to the Division Secretary the number of members secured during the day—the aim being 100 per cent. membership in every city, town and village.

The following resolution was passed and ordered to be submitted to the Executive Council of the Association: "Resolved that the Ontario Division Executive urge the Executive Council of the Association to send a further deputation to Ottawa to press upon the Dominion Government the immediate appointment of a permanent Tariff Board and that the members of this Board accompany the proposed Investigating Committee of Cabinet Ministers, if the same is appointed."

Information re Exhibitions

Useful service has been performed by the Trade Sections Departments in investigating the various exhibitions which are announced for the next year or two in Great Britain, the United States, South America, South Africa and elsewhere. A memorandum has been prepared dealing with each of these undertakings and showing whether or not they are deserving of the support of Canadian manufacturers. Any one interested in securing information about any proposal for the holding of international exhibitions should communicate with the Department. The exhibitions dealt with in the present memorandum are,—

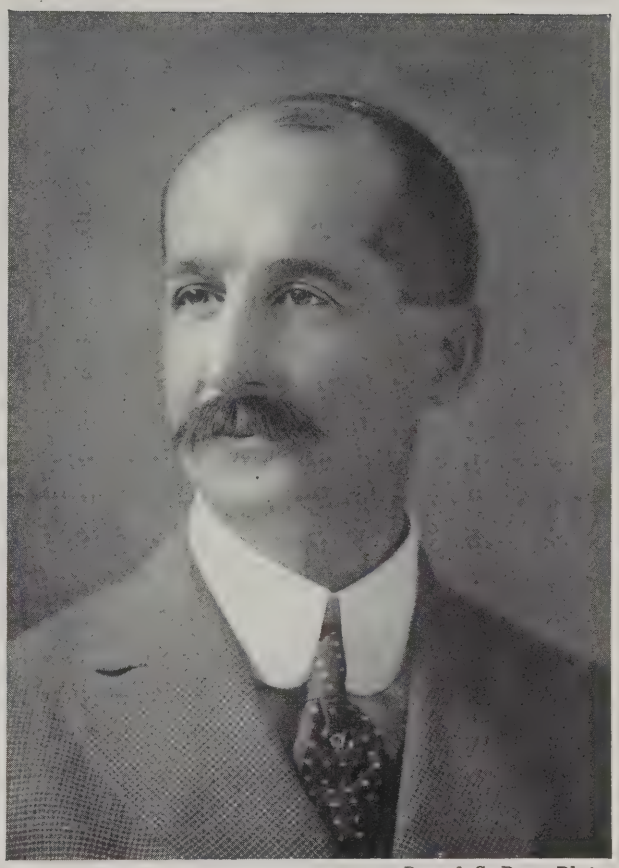
(*a*) A permanent exhibition of samples or photographs (in duplicate) to be used in connection with the propaganda of the Canada Trade Mission in London, England.
(*b*) The British Empire Exhibition to be held in London, England, in 1921.
(*c*) The British Industries Fairs to be held in London, Birmingham and Glasgow, in 1920.
(*d*) A Canadian Exhibition to be held in Agricultural Hall, London, England, in June 1920.
(*e*) A permanent exhibition in the Grand Central Palace, New York.
(*f*) A floating exhibit to be sent to South American ports.
(*g*) A national exhibition to be held in Pretoria, S.A.
(*h*) A sample fair to be held in Brussels, Belgium, in 1920.

Fire Protection Survey

With the approval of the Insurance Committee of the C.M.A., a campaign is at present being conducted by the Dominion Fire Commissioner, Mr. E. Grove Smith, specially directed towards the improvement of factory properties from a fire protection point of view. 5,000 copies of a blank form, with explanatory letter, have been sent to the more important industrial establishments in the Dominion asking for data upon which to base further action. More than 70 per cent. of the forms were promptly returned and large numbers were accompanied by urgent requests for advice. Addressing the members of the Dominion Fire Prevention Association on the campaign, Mr. Smith says:—

"After roughly classifying the returns, it was apparent that in the majority of cases inspection was essential before proper guidance could be given. As this Department is not provided with a staff to carry on such work, arrangements were made with the Canadian Automatic Sprinkler Association whereby the competent engineers of that Association resident at various points throughout the Dominion will, as far as possible, inspect and report upon properties to the Department. While acting under the authorization of the Department, these inspectors will not advise or otherwise influence property-owners in regard to improvements but the Department will directly supply particulars of such improvements and changes as may appear desirable. Where the installation of automatic sprinkler protection is advised, a voluntary agreement entered into between all the automatic sprinkler contracting companies and the Department makes possible the very minimum cost. All items and charges are filed in detail and are carefully scrutinized by the Department.

"From the foregoing it will be recognized that the task undertaken is one of magnitude and importance. At the present time (Oct. 22nd.), thirty-five plants are undergoing inspection and these will be followed by others as rapidly as inspectors are available to do the work. To accomplish the ultimate aim, the co-operation of every fire protection engineer and insurance expert in Canada is urgently needed. The money at present available for fire prevention work by the Department is less than $5,000. This limited amount must meet all contingencies, including salaries, travelling, printing and office expenses, and cannot be further supplemented. While considerable work has been accomplished, it is obvious that the multitudinous demands upon our services cannot be even partially met unless we have the voluntary and willing co-operation of every person qualified to render assistance."



—*B. and C. Press Photo*

Mr. C. Howard Smith

Chairman of the Montreal Branch and vice-chairman of the new Quebec Division, who has also been appointed a member of the Executive Committee

Membership Campaign

To assist in the membership campaign which will take place during the week of December 1st, a list of non-members has been compiled from the information secured for the Trade Index. This list has been classified according to the five Divisions of the Association, and the names forwarded to the Division Secretaries as a basis for work. The Membership Committee, which has been planning the campaign recommends the following plan,—

(*a*) Each Division should immediately call a meeting of the Division Membership Committee to discuss the organization of the Divisional campaign.
(*b*) Division Secretaries should communicate with a member of the Association in each locality where there are

manufacturers who are not members, asking him to form a local committee for the campaign, to which a list of non-members in the locality will be sent.

(*c*) A circular to be mailed from Head Office in sufficient time to reach all members prior to December 1st, featuring President Howard's appeal to the Annual Meeting for each present member to try to secure one new member this year.

(*d*) After the campaign opens local committees to communicate each night with the Divisional Secretary, stating the number of members secured during the day and the Divisional Secretary to wire the total each night to Head Office.

(*e*) The slogan of the campaign to be "One Hundred per cent. Membership in every City, Town and Village."

Our New Members

At the September meetings of the Membership and Executive Committees, a list of 46 applications for membership was favourably disposed of. Of these, 33 represent new firms, and 13 additional members from companies already members. The new members are as follows,—

P. McA. Carrick	B. C. Pharmacal Company, Ltd., Vancouver, B.C.
E. Fred Simmons	Cravat & Regalia Co., Limited, Vancouver, B.C.
Wm. H. Davies	Davies Paper Box Co., Ltd., Vancouver, B.C.
R. L. Cliff	Dominion Canners, B. C., Limited, Vancouver, B.C.
G. Kostman	Famous New York Cloak Suit Co., Vancouver, B.C.
Geo. E. Herrmann	Vancouver Creosoting Co., Ltd., Vancouver, B.C.
J. C. Pendray	British America Paint Co., Ltd., Victoria, B.C.
Wm. H. Munsie	Shawinigan Lake Lumber Co., Ltd., Victoria, B.C.
H. R. Savage	Standard Steam Laundry Limited, Victoria, B.C.
A. F. Pamenter	Davison Lumber & Mfg. Co., Ltd. Bridgewater, N.S.
D. H. McDougall	Nova Scotia Steel & Coal Co., Limited, New Glasgow, N.S.
A. J. Morrison	Sydney Milling Co., Limited, Sydney, N.S.
L. C. Archibald	Crushed Milk & Cream Co., Ltd., Truro, N.S.
L. R. Baker	Burgess Batteries, Limited, Winnipeg, Man.
L. T. Walls	Central Tools & Forgings, Ltd., Winnipeg, Man.
David I. Dyson	Dyson Vinegar Company, Winnipeg, Man.
A. C. Jones	The Canadian Sander Mfg. Co., Limited, Brockville, Ontario.
Reginald L. St. Clair	St. Clair Brothers, Galt, Ontario.
John C. Breithaupt	The Hastings Tanning Co., Ltd., Hastings, Ont.
F. S. Brown	The Brown Boat Company, Lakefield, Ont.
E. Coleman	Regal Manufacturing Company, London, Ont.
James Mitchell	W. & J. Mitchell, Toronto, Ont.
J. S. Ramsay	Hall Manufacturing Company, Ltd., Summerside, P.E.I.
	Rugg Ball Mfg. Co., Ltd., Ayers Cliff, Que.
Edmund F. Richards	Salem Oil & Grease Co. of Canada, Limited, Farnham, Que.
C. Eug. Marchand	La Manufacture de Matelas, Enrg., Isle Verte, Que.
Thos. V. Bell	Thos. V. Bell, Limited, Montreal, Que.
O. Marchand	La Compagne Marchand Freres Ltee., Montreal, Que.
Travice A. Tod	The Herald Press, Limited, Montreal, Que.
W. J. Carrigan	International Machinery & Supply Company, Montreal, Que.
Ewart G. Horne	Lockwood, Greene & Co. of Canada, Limited, Montreal, Que.
Joseph Murphy	Lymburner Brass Works, Inc., Montreal, Que.
Gerald M. Smith	Precision Tool & Machine Co., Limited, Montreal,

The additional members accepted were the following,—

A. P. Tynan	Giddings, Limited, Winnipeg, Man.
Fred J. C. Cox	Oribo Manufacturing Co., Ltd., Winnipeg, Man.
W. E. Sprague	Canadian Westinghouse Co., Ltd., Hamilton, Ont.
Chas. W. Corbett	W. T. Rawleigh Co., Limited, Toronto, Ont.
J. G. Perrin	Willys Overland, Limited, Toronto, Ont.
J. F. MacKay	Willys Overland, Limited, Toronto, Ont.
R. S. Chilvers	Berliner Gramophone Co., Ltd., Montreal, Que.
J. T. Dohm	International Machinery & Supply Company, Montreal, Que.
R. J. Hiller	International Machinery & Supply Company, Montreal, Que.
C. H. Lyons	The Nichols Chemical Co., Ltd., Montreal, Que.
A. D. Huff	Riordon Pulp & Paper Co., Ltd., Montreal, Que.
Chas. Ritz	Robin Hood Mills, Limited, Montreal, Que.
G. A. Irwin	Algoma Steel Corporation, Ltd., Montreal, Que.

At the October meetings of the Membership and Executive Committees, the following companies were admitted to membership.—

Steel Ships	J. Coughlan & Sons, Vancouver, B.C.
Barrels, etc.	Bridgewater Cooperage Co., Ltd., Bridgewater, N.S.
Shirts, collars	John Forsyth, Limited, Kitchener, Ont.
Wiping cloths	E. Pullan Wipers & Waste Co., Toronto, Ont.
Mineral waters	J. E. T. Morris, Charlottetown, P.E.I.
Canned goods	J. W. Windsor & Co., Ltd., Montreal, Que.
Ships	Tidewater Shipbuilders Ltd., Three Rivers, Que.
Wool stock	British Wool Stock Co., Ltd., Toronto, Ont.
Paints, stains	Sturgeons Limited, Toronto, Ont.
Flour, butter, etc.	Dauphin Milling & Creamery Co., Dauphin, Man.
Sash, doors, etc.	Dauphin Sash & Door Factory, Dauphin, Man.
Sash, doors, etc.	The Fusee McFeetors Co., Ltd., Neepawa, Man.
Sweaters, etc.	S. Coleman, Winnipeg, Man.
Talking machines	Melotone Talking Machine Co., Winnipeg, Man.
Dresses	Sterling Mfg. Co., Ltd., Winnipeg, Man.
Lightning rods	Shinn Mfg. Co. of Canada, Ltd., Guelph, Ont.
Ships fittings	Ontario Specialties, Ltd., Ottawa, Ont.
Electric fixtures	Ottawa Brass Mfg, Co., Ottawa, Ont.

Additional members accepted in October were as follows,—

Ashley A. Colter	Smith Foundry Co., Ltd., Fredericton, N.B.
W. S. Kilburn	John Palmer Co., Ltd., Fredericton, N.B.
W. K. Ganong	Ganong Bros., Ltd., St. John, N.B.
Walter Booth	Booth Coulter Copper & Brass Co., Ltd., Toronto, Ont.
Daniel Strachan	Imperial Oil, Limited, Toronto, Ont.
G. A. Myers	Borden Milk Co., Limited, Truro, N.S.
Andrew Sangster	Canadian Ingersoll Rand Co., Ltd., Sherbrooke,
Frank S. Hodgins	Williams, Greene & Rome Co., Ltd., Kitchener,

Winnipeg Income Tax

A special committee of the Winnipeg Branch has under consideration the application of the city of Winnipeg for power to assess an income tax on the incomes of individuals and corporations. In the case of individuals the tax is graduated from one per cent. on the first $1,000 of taxable income up to 8 per cent. on all income in excess of $10,000. On the taxable incomes of corporations the rate is 5 per cent. When this matter was discussed before, the Branch took the position that the Dominion Government's requirements to meet liabilities incurred, would be so heavy that this field of taxation should be left to that Government and that civic or provincial governments should not encroach thereon, until it was known what income taxes the Dominion Government would have to assess to meet its liabilities.

Laying Ground for Kitchener Branch

Formation of a branch organization at Kitchener, Ont., in connection with the Canadian Manufacturers Association was emphasized at a meeting of the Kitchener and Waterloo Manufacturers Association, held in the Canadian Club, Kitchener, on Monday, October 27. In addition to a large attendance of local manufacturers there were present a delegation of Canadian Manufacturers officers and officials, including Messrs. J. S. McKinnon, 1st vice-president of the general Association; George H. Douglas, Chairman of the Ontario Division; J. E. Walsh, General Manager; J. R. K. Bristol, Manager Tariff Department, and H. Macdonold, Legal Secretary and Secretary Ontario Division. Mr. H. M. Snyder, chairman of the local Association, presided, and having welcomed the visitors, vacated the chair in favor of Mr. Sam J. Williams.

Mr. J. S. McKinnon delivered an address and pointed to the war achievement of Canada as an augury of the industrial development, which was certain to follow if the manufacturers took advantage of their opportunity. He bore testimony to the enterprise and progressiveness of the manufacturers of Kitchener and Waterloo, whose factory products were known far beyond the limits of their province. He referred to the services rendered by patriotic manufacturers like Mr. Sam J. Williams, whose enterprise had contributed so much to the prosperity of Kitchener and whose welfare organization had won the appreciation of all. Mr. McKinnon also referred to the value of the Canadian Manufacturers Association, urging that all manufacturers should be active members. He quoted specific instances of direct benefit obtained by his own firm.

Mr. J. E. Walsh gave a comprehensive resumé of the progress of the Association for the past thirteen years. A recent visit to the East had convinced him of the healthy optimism pervading all the industries. Mr. Walsh then

reviewed the services rendered by the various departments of the Association, showing that it would be impossible for a local or sectional organization to command services such as the Canadian Manufacturers Association was able to furnish. The organization of an office in Ottawa had been of immense service, enabling them to obtain quick action in regard to important matters affecting many branches of industry. The allocation of the Dominion into five divisions would ensure in a special manner the organization of district branches, so that the most efficient services would be at the command of all sections.

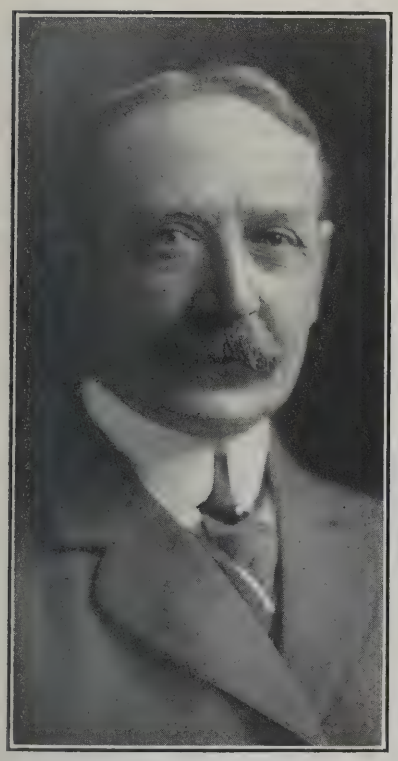
Mr. Bristol urged that they should begin to organize groups of industries. He spoke of the relation of the tariff to the industries, explaining that all civilized countries had found the adoption and application of the tariff in some form an absolute industrial necessity, and that if Canada was to maintain her industrial supremacy it must proceed along similar lines.

General emphasis was laid by all the speakers on the expediency of Kitchener at once organizing as a District Branch of the Canadian Manufacturers Association, and it is expected that this will be consummated at an early date.

The speakers being accorded a hearty vote of thanks, a highly successful meeting was brought to a close by the singing of the National Anthem.

Meetings Held in the Maritime Provinces

By J. T. STIRRETT
General Secretary, Canadian Manufacturers Association



Mr. W. S. Fisher
Second Vice-President, C.M.A., who did good work in connection with the Maritime Tour

A VERY successful tour of the Maritime Provinces has just been completed by a number of members of council and heads of departments of the Association. The tour was arranged in connection with the Executive Council meeting which was held in St. John, N.B., on October 1st, followed by the semi-annual meeting of the Maritime Division of the Association in St. John on October 2nd. Council decided to hold the October meeting in St. John in order to allow Western and Central Canadian members the opportunity of meeting our members in the Maritime Provinces, and also to bring the services of the Association to those provinces.

The party left Toronto on September 28th. On the following day the Executive Committee met in the Association's Montreal offices, and left for Fredericton on the night of September 29th. A business meeting was held in Fredericton followed by a trip of inspection to various industries. Manufacturing appears to be in a prosperous condition in the City of Fredericton, and a considerable number of plants are making extensions to their premises in order to take care of increased business.

Arrangements for the Executive Council meeting in St. John had been completed by the local members under the direction of Mr. W. S. Fisher, Second Vice-president of the Association. The following is a complete list of those who were present at the meeting of Council:

T. P. Howard	Phoenix Bridge & Iron Works, Ltd., Montreal, Que.
C. Howard Smith	Howard Smith Paper Mills, Ltd., Montreal, Que.
W. H. Shapley	Sterling Action & Keys, Ltd., Toronto, Ont.
S. Harris	Harris Lithographing Co., Toronto, Ont.
H. A. Telfer	The Telfer Mfg. Co., Toronto, Ont.
H. W. Fleury	J. Fleury's Sons, Aurora, Ont.
Geo. H. Douglas	Thornton & Douglas, Ltd., Hamilton, Ont.
M. R. Meldrum	Herbert Morris Crane & Hoist Co., Niagara Falls, Ont.
G. D. McKinnon	McKinnon Steel Co., Ltd., Sherbrooke, Que.
P. E. Joubert	Lamontagne, Ltd., Montreal, Que.
F. W. Stewart	Cluett, Peabody & Co., Montreal, Que.
Joseph Picard	Rock City Tobacco Co., Ltd., Quebec, Que.
Geo. Fleming	Phœnix Foundry Co., St. John, N.B.
R. H. McKay	McKay & Fraser, New Glasgow, N.S.
Rufus E. Dickie	————, Stewiacke, N.S.
A. D. Ganong	Ganong Bros., St. Stephen, N.B.
Jas. F. Cumming	Jas. W. Cumming & Son, New Glasgow, N.S.
Alex. L. Fowler	Fowler Milling Co., St. John, N.B.
C. S. Christie	Christie Woodworking Co., St. John, N.B.
R. A. McAvity	T. McAvity & Son, St. John, N.B.
Cheslie Peters	C. H. Peters & Sons, St. John, N.B.
Lewis Connors	Connors Bros., Black's Harbor, N.B.
A. L. Foster	T. S. Simms Co., St. John, N.B.
J. D. Palmer	Hartt Boot & Shoe Co., Fredericton, N.B.
W. S. Fisher	Enterprise Foundry Co., Sackville, N.B.
W. F. Knoll	Jas. Pender & Co., Ltd., St. John, N.B.
Alex. Wilson	Wilson Box Co., St. John, N.B.
W. A. Christie	Christie Bros. Co., Amherst, N.S.
C. E. Barnard	Burnham Morrill Co., Portland, Me.
Wm. Knight	Amherst Foundry Co., Amherst, N.S.
W. C. Newcombe	Eastern Linen Mills, Moncton, N.B.
F. C. Beatteay	Stetson-Cutler Co., St. John, N.B.
J. F. Walsh	Canadian Manufacturers Association, Toronto.
J. T. Stirrett	Canadian Manufacturers Association, Toronto.
J. R. K. Bristol	Canadian Manufacturers Association, Toronto.
H. R. Thompson	Canadian Manufacturers Association, Amherst.

The decision to hold the Council meeting in conjunction with the semi-annual meeting of the Maritime Division was very satisfactory, as it made possible the transaction of a great deal of business of peculiar interest to the three Maritime Provinces. Visitors were taken through some of the principal industries of the city and made an extensive trip of the harbor. Special interest was taken in the very extensive harbor developments at Courtenay Bay. The visitors were impressed with the magnificent advantages which St. John possesses as a winter port and as the terminus of the Canadian Pacific Railway.

The party arrived at Moncton on October 3rd, visited a number of industries and held the usual business meeting. The City of Moncton has doubled its population within the past few years and now includes with its suburbs over 20,000 people. Those who had not visited Moncton for ten years scarcely recognized the city, so great has been the development in the building, not only of factories and business establishments, but also of dwellings. About seventy-five persons attended a luncheon in Moncton given in honor of the Association's delegates. These included members of the Board of Trade, manufacturers, and other business men.

The party arrived in Truro on October 4th, inspected the industries and noted with gratification two or three comparatively new factories.

In Halifax, where the party remained two days, they had an excellent opportunity not only to visit the industries, but

to inspect the harbor developments and the new freight handling facilities which are being established in connection with the Canadian Government Railways. A joint meeting was arranged by the Halifax members, including the Lieutenant-Governor of Nova Scotia, representatives of the banks, railways, business interests and also members of the Association.

In Sydney the party went through several plants and were agreeably surprised at the remarkable growth of this ocean port. The party also visited North Sydney for the purpose of studying the transportation arrangements to Newfoundland.

In New Glasgow, where the party arrived on October the 8th, they had the pleasure of witnessing the launching of the Canadian sealer which was built in New Glasgow. They also made the usual inspection of the principal industries. New Glasgow is one of the most thriving manufacturing towns in the Maritime Provinces.

Probably one of the best meetings of the trip was held in Amherst, the headquarters of the Maritime Division of the Association. There was practically a complete attendance of all the manufacturers in the vicinity. The party were glad to see that the city was continuing the extraordinary rapid growth which it has enjoyed during the past ten years.

The last meeting of the trip was held in Charlottetown and was successful in every way. Local members had invited the Premier of Prince Edward Island and other leading business men to meet the visitors, and the problems of the Island were fully discussed.

The delegation were unanimous in considering the trip through the Maritime Provinces an unqualified success, at least from their point of view, and from assurances which were received throughout the journey they were lead to believe that our members in the Maritime Provinces had received some benefit. The meetings which were held at the places mentioned above were unusually interesting and instructive. The heads of departments of the Association who were with the party, took up in detail the various technical matters upon which members wished to secure information, but, in addition to this, national problems and problems affecting the Maritime Provinces as a whole were very fully and frankly discussed, with the result that a great deal of useful information was elicited. The visiting party were greatly impressed with the prosperity of the Maritime Provinces from one end of these provinces to the other. There appeared to be no poverty whatever. The towns and cities visited gave unmistakable evidence of steady and substantial growth. Trade conditions generally were very satisfactory and the average prosperity of city and country was high.

Canadian exports of pulp and paper during August, 1919, amounted in value to $8,348,179, as compared with $7,118,398 in August, 1918, a gain for this year of $1,229,781. Exports of pulpwood amounted to $944,877, against $1,978,012 a year ago, a falling off of $1,033,135. The paper exports included 57,817 tons of newsprint, valued at $4,140,812, the importing countries including the United Kingdom, United States, Argentine Republic, Australia, Brazil, British South Africa, Cuba, New Zealand, Peru and other countries.



THE TOURING PARTY AT FREDERICTON

Front row, left to right—H. W. Fleury, J. Fleury's Sons, Aurora; W. H. Shapley, Sterling Actions & Keys, Toronto; G. D. MacKinnon, MacKinnon Steel Co., Sherbrooke; H. R. Thompson, Secretary Maritime Division, Amherst; P. E. Joubert, Lamontagne, Ltd., Montreal.

Second row—H. A. Telfer, Telfer Bros., Ltd., Toronto; J. T. Stirrett, General Secretary, Toronto; J. R. K. Bristol, Manager Tariff Department, Toronto; C. Howard Smith, Howard Smith Paper Mills, Montreal; T. P. Howard, Phœnix Bridge & Iron Works, Montreal; J. E. Walsh, General Manager, Toronto; F. W. Stewart, Cluett, Peabody & Co., Montreal; Sam Harris, Harris Litho Co., Montreal.

Third row—H. S. Campbell, president of Board of Trade, Fredericton; C. K. Palmer, John Palmer Co., Fredericton; J. D. Palmer, Hartt Boot & Shoe Co., Fredericton; G. H. Douglas, Thornton & Douglas, Hamilton; M. R. Meldrum, Herbert Morris Crane & Hoist Co., Niagara Falls; R. H. Simmonds, secretary Board of Trade, Fredericton; R. H. Bennett, Gleaner Limited, Fredericton; Mr. Campbell, Fredericton; W. S. Kilburn, John Palmer Co., Fredericton.

Back row—E. J. Kingsley, Canadian Cottons, Marysville, N.B.; Dr. C. C. Jones, Chancellor Univ. of N.B.; W. T. Chestnut, Chestnut Canoe Co., Limited; J. A. Reid, Hartt Boot & Shoe Co.; Jas. S. Neill, Jas. S. Neill & Sons; F. B. Edgecombe, F. B. Edgecombe Co.; R. P. Allen, Fredericton Mail; Mr. Smith, Fredericton.

Quebec Division is Organized at Montreal

Enthusiastic Meeting Was Held in the Windsor Hotel on October 16 —Officers and Committees Elected—Several Interesting Addresses Delivered and Discussions Held—A Good Augury for the Future

By W. P. HUGHES
Secretary, Quebec Division

THE keen interest displayed by members of the Association located outside of the City of Montreal, and the bright, instructive nature of the discussions throughout the sessions were the outstanding features of the Quebec Division Organization Convention that was held in the Windsor Hotel, Montreal, on Thursday, October 16th last.

When the President, Mr. T. P. Howard, called the morning session to order there were present representative manufacturers from nearly all of the principal industrial centres of the Province, and from the opening moments it was evident that the divisional organization would commence its career under most auspicious conditions. Mr. Howard welcomed the members, touching on the importance to them of co-operation in dealing with their common problems. He intimated that the formation of a Quebec Division was aimed at providing machinery for such study, and expressed the earnest hope that the members within the Province would make the most out of the opportunity which was thus offered. He explained that they were fortunate in having with them Mr. J. E. Walsh, the General Manager of the Association, and Mr. J. R. K. Bristol, the head of the Tariff Department. He then called on Mr. Walsh to outline to the meeting what the Association Executive had had in mind when the re-organization into divisions had been passed last June.

To Give More Efficient Service

Mr. Walsh reviewed the development of the plan. It had been felt for some time, he said, that means should be evolved for bringing the services of the Association into closer touch with the members and also bringing the members into closer touch with one another. It was a matter of better administration of the Association's affairs. There had been the criticism that there was too much centralization in the past, and that members located outside of the two centres of Montreal and Toronto had had little to say in the formation of the Association's policies. Such criticism had been particularly levelled against Toronto, no doubt due to the fact that as the head office of the Association was located in that city and most of the Committee meetings were called in that centre, such meetings had been attended for the most part by Toronto members. This, Mr. Walsh maintained, fully explained the part played by such members and denied that there had been any conscious endeavor to keep the control of the Association's policies in the hands of a few. About a year ago there had been considerable agitation to have the head office of the Association moved to Ottawa. A compromise had been effected whereby a representative had been appointed in that city, and Mr. Walsh paid a high tribute to the effective work which Mr. G. M. Murray and his assistant, Mr. Blake Robertson, had accomplished. In fact, the value of their work had been such as to make the Executive wonder how the Association had ever got along without it. It had been still felt, however, Mr. Walsh explained, that the re-organization of the members in the various provinces into divisions, would co-ordinate and facilitate the whole work of the Association. The keynote of the whole plan was service to the members, and it was hoped that through such machinery the members would use this service. He then outlined briefly the work which would properly come under a Division, mentioning police work and the development of industries.

Branches to Carry On Still

In the discussion which followed it was pointed out that the branches within a Division would still carry on and would have within their territory sections of the provinces as at present. Connecting and unifying the work of all the branches would be the provincial Executive Committee and officers.

The chairman then explained to the meeting that it was open for them to decide what number would constitute the Provincial Executive Committee. He intimated that 23 nominations had been received by the Secretary for nomination to this Committee and suggested that if it met with the views of the meeting this number would not be in any way too large for the important work which would be carried on by it.

On motion of Mr. Paul E. Sise, seconded by Mr. S. J. B. Rolland, the meeting unanimously decided to elect a committee of 23, to which would be added the chairmen of the various branches within the Province. Mr. Howard then announced that the only nominations which had been received for chairman and vice-chairman were Mr. G. H. Duggan and Mr. C. Howard Smith, and they were declared elected by acclamation. In the absence of Mr. Duggan (which was unavoidable, owing to a special convocation at Queen's University, where he was the recipient of an honorary degree), Mr. Smith was called to the chair. Mr. Smith thanked the members for the singular honor which had been conferred upon him, and expressed his confidence in the future usefulness of the Division.

The secretary then read the list of nominations which had been received for the Executive Committee—these were as follows:

Coghlin, B. J. .....Montreal.	Warrington, J. E. ....Quebec.
Grothé, Raoul .....Montreal.	MacKinnon, Geo. D. ..Sherbrooke.
McMaster, R. H. ....Montreal.	Welsh, H. W. .....Sherbrooke.
Ramsay, Walter B. ..Montreal.	Laframbroise, C. J. ..St. Hyacinthe.
Richard, J. A. .....Montreal.	Fraser, D. J. .....St. Johns.
Stewart, F. W. .....Montreal.	Alain, J. E. .....Victoriaville.
Sise, Paul E. .....Montreal.	Paradis, A. A. .....Victoriaville.
Smardon, Walter ...Montreal.	Bodden, W. F. .....Victoriaville.
Fortier, J. H. .....Quebec.	Rolland, Jean .....St. Jerome.
Gignac, O. A. .....Quebec.	Miner, W. H. .....Granby.
Picard, Jos. .....Quebec.	Matheson, W. H. ....Shawinigan.
Ryan, Robert .....Three Rivers.	

Ex Officios:

Sadler, W. J., Chairman Montreal Branch.
Sangster, Andrew, Chairman Sherbrooke Branch.
Letourneau, Louis, M.P., Chairman, Quebec Branch.

These were declared elected and thus became the first Executive Committee of the Quebec Division.

Noon Luncheon

The "out-of-town" members were the guests of the Montreal branch members at a luncheon served immediately

after the morning session. Among those present as guests were:

Renault, Raoul	Secretary, C.M.A., Quebec Branch, Quebec.
Picard, Jos.	Rock City Tobacco Co., Quebec.
Gignac, O. A.	J. H. Gignac, Ltd., Quebec.
MacKinnon, Geo. D.	MacKinnon Steel Co., Ltd., Sherbrooke.
Boivin, P. E.	Granby Elastic Web Co., Granby.
Trotter, W. C.	Standard Clay Products Co., Ltd., St. Johns.
Fraser, D. J.	The Singer Mfg. Co., St. Johns.
Gareau, J. O.	The E. T. Corset Co., Ltd., St. Hyacinthe.
Bodden, W. F.	Mica Insulator Co., Ltd., Victoriaville.
Alain, J. E.	The Victoriaville Furniture Co., Ltd., Victoriaville.
Paradis, A. A.	Victoria Hide & Skin Co., Victoriaville.
Farand, J. A.	The Plessisville Foundry Co., Plessisville Sta.
Savoie, J. A.	The Savoie Guay Co., Plessisville Sta.
Kirouac, O. F.	La Cie des Industries Cantin, Warwick.
Bellavance, A.	La Cie de Lainage de Rimouski, Rimouski.
Ball, H. S.	The Domnion Snath Co., Waterville.

Lieut.-Col. W. J. Sadler, Chairman of the Montreal Branch, extended a hearty welcome to the visitors, and a cordial spirit of friendliness was in abundant evidence throughout the function.

Afternoon Session

Three very interesting subjects occupied the attention of the afternoon meeting. "Needed Tariff Changes" was the subject of an instructive address by Mr. J. R. K. Bristol, head of the Customs Department of the Association. A thoughtful presentation of the present day question of "Profit sharing" was given by Mr. J. H. Sherrard and Mr. F. W. Stewart.

In opening his address on "Needed Tariff Changes," Mr. Bristol alluded to the last report of the Minister of Finance to the effect that the country was ripe for a revision of the tariff. He pointed out, however, that the economic conditions of European and other countries had been such as to have prevented them arriving at the stage of stability to permit of Canada attacking the tariff problem this autumn at least. He referred to the resolutions which had been adopted by the annual meeting urging the Government to promote preferential tariffs applicable within the United Kingdom and possessions, and the appointment of a Tariff Commission. He pointed out that all other countries are uniformly in favor of a high tariff, and thought it would be rank folly to even talk of lowering the tariff at this time.

Offset the Advantages

Asked as to the effect of the preferential tariff already established, Mr. Bristol thought that it had been very beneficial in increasing trade between Great Britain and the colonies, but that United Kingdom manufacturers had stated that they had not derived the benefits that they should have by reason of the increased ocean rates which offset the advantages obtained by the tariff.

Mr. Bristol's main point was in the urging of the appointment of a Tariff Advisory Board to study and deal with matters appertaining to the tariff. To show the need for the establishment of the preferential tariff the speaker showed that Canada had imported $800,000,000 worth of goods during the past year from the United States, while that country had only imported $400,000,000 worth from Canada, and that the average *ad valorem* duty of the United States with its 110,000,000 of people is from 17 to 46 per cent., while that of Canada is less than 17 per cent.

Mr. D. J. Fraser thought that the Association should fight strongly against any reduction in the tariff, as he does not see how most Canadian manufacturers could carry on with less than at present.

The question of German competition was also raised, and it was urged that steps be taken to protect those manufacturers who, during the war, started making lines of commodities which had hitherto been supplied by German manufacturers. It was shown that German and Austrian manufacturers were already entering the field with a sharp challenge to Canadian manufacturers of these lines, in spite of the economic conditions obtaining in Central Europe.

Profit-Sharing

Mr. J. H. Sherrard, of the Alaska Bedding Co., Ltd., outlined a plan which has been in operation in his company for nine months for obtaining greater production and a general improvement of conditions through profit-sharing with employees. Mr. Sherrard stated that early last year his company came to the realization that the dollar was no longer an incentive to greater production by its workers and therefore carefully studied plans for increasing production along different lines. Under the scheme which was decided upon each employee of the company receives a yearly dividend upon his yearly earnings on the same basis as the common stockholders of the company.

An arbitration board has been established to pass upon the cases of any employees discharged. It was promised that no employee would be discharged without cause, and any one discharged could go before this board for a hearing as to the justice of his dismissal.

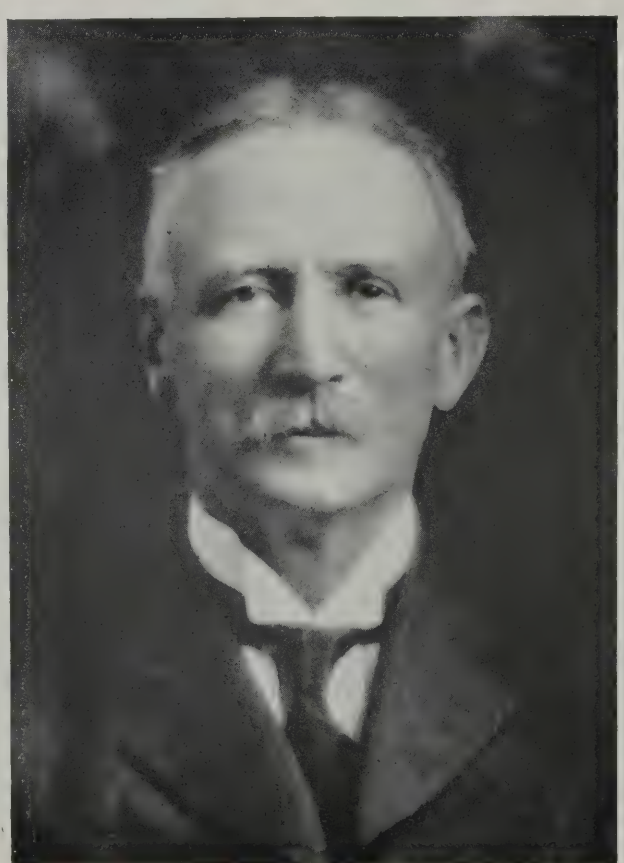
Mr. Sherrard stated that the plan was successful up to date in increasing production, decreasing waste and promoting efficiency generally.

The Plan Submitted

Mr. F. W. Stuart, of the Cluett-Peabody Company, submitted the following plan which General Manager Walsh proposed that he hand to the incoming Executive to be submitted to the Industrial Relations Committee:

"The weak point of all profit-sharing plans which I have examined, is the condition created by the non-distribution of profits during periods when there are no profits to distribute.

"Possibly 75 per cent. to 85 per cent. of wage-earners live up to their incomes, whether



—B. and C. Press Photo

Mr. G. H. Duggan

Who enjoys the distinction of being the first chairman of the Quebec Division, C.M.A.

such incomes are straight wages, or wages and bonus, or wages and share of profits.

"When shares of profits are received over a term of prosperous years, and a period of depression is reached, and the distribution of a share of profits is discontinued, many employees, anticipating their share of profits, and having possibly undertaken obligations which they figured upon liquidating with their share of profits, are placed in a very undesirable and serious position, in not being able to meet these obligations.

"Dissatisfaction, suspicion and discontent is therefore created, to the detriment of the industry in which this condition has been brought about.

"So far as I can learn, the wage-earner with a family or dependents to support, wishes a plan or a system which will assure him or her a regular income from year to year, no matter what the economic conditions may be. It is, therefore, desirable to devise a plan which will enable this to be done, without being too great a charge on the resources of the industry concerned, or increase the fixed charges to too great an extent.



Organizers of the Quebec Division

Group of well-known manufacturers present at the recent organization of the Quebec Division in Montreal

"Having this in mind, I submit the following as a basis, or plan, to work upon, to perfect a system which would be fair and in the interests of employers and employees alike:

"First, a fair wage, commensurate with the cost of living, must be paid. A per cent. of the total amount of wages paid, equivalent to the per cent. of dividend paid on preferred stock, be placed in a fund and invested in Government or similar securities; this fund to be the property of the employees and administered by a committee comprised of members of the executive of the company and of the employees.

"If 7 per cent. is paid on preferred stock, 7 per cent. of wages would be a fixed charge on the business and placed semi-annually or annually in this fund.

"If the wages of a company totalled $1,000,000, the annual contribution to the fund would be $70,000. The interest, say 5 per cent., on this amount, would give an additional revenue of $3,500.

"This amount added to the fund covering a period of, say five to ten years, could reasonably be assumed to serve its purpose during a period of depression, of say two to three years.

Object of the Fund

"The object of the fund would be to take care of such conditions, or others, as follows:

"During times of depression, if the factory is running on short time, the difference between short running time and regular running time would be paid from the fund.

"If the plant is closed for repairs, vacation, or any other reason, partial or full wages would be paid from the fund.

"The fund would be used for paying accident and sickness insurance—the latter possibly to include illness of any member of an employee's family, who may be too young or too old to earn a wage.

"A fixed amount would be paid for every birth or death in the family of an employee. The fund could also act as a pension fund, assuring an income to retired aged employees.

"The big problems which face the average wage-earner, are the periods of unemployment, working on short time, illness in the family with its additional expense, the closing down of the plant for repairs, vacation, or other reasons, and cutting off his income for periods which run him into debt, which means months or years of saving to wipe out.

"The plan, which, in my opinion, will do away with the anxieties, troubles and conditions which are created during periods such as these, will be the one which will tend to go far towards making living conditions of the average family satisfactory to them, and bring happiness and contentment to employees in factories, offices, and warehouses.

"Assure a regular wage from year to year with provision for illness, accident, old age, etc., and I believe there will be very few industrial disturbances amongst employees. I am sure that such a plan as I have outlined, carefully worked out, and covering all the good and bad features which might arise, will be acceptable to employees generally, and do away with the weak features of weekly, monthly, or annual cash or stock distribution of profits, which are usually spent as received and no provision made for the meeting of unusual or extraordinary conditions, over which the wage-earner has no control."

One of the most lively discussions which took place during the day followed the addresses of Messrs. J. H. Sherrard and F. W. Stewart, which in itself was evidence of the fact that the subject of "Profit-sharing" was being seriously studied by a great number of the members present.

Executive Committee Meeting

Following the afternoon session, the first meeting of the Provincial Executive Committee was held with Mr. C. Howard Smith presiding. The chief business concluded was the appointment of a Sub-Executive Committee, consisting of the chairmen of the Montreal, Quebec and Sherbrooke branches, together with Messrs. B. J. Coghlin, F. W. Stewart, J. A. Richard, Jean Rolland, Walter B. Ramsay, and G. H. Duggan, and C. Howard Smith as ex-officios. It was decided that five members of this sub-committee would constitute a quorum. A Legislation Committee was also appointed, consisting of Messrs. Louis Letourneau, R. H. McMaster, J. A. Richard, Geo. D. MacKinnon, Robt. Ryan, W. H. Walsh, J. E. Alain, and G. H. Duggan and C. Howard Smith, ex-officios. The quorum for this committee was fixed at four.

After a general discussion as to the work which might be expected to come before the Executive this year, the meeting was adjourned subject to the call of the Chairman.

At the informal dinner given in the evening, which was one of the most pleasant features of the day, a strongly-worded resolution presented by Mr. F. W. Stewart, seconded by Lieut.-Col. W. J. Sadler, opposing any acquisition of the G.T.R., was unanimously adopted. The text of this resolution was as folows:

"In view of the grave financial responsibilities already assumed by the Dominion of Canada through the acquisition

and operation of railroads, which responsibilities, added to a public debt enormously increased by war expenditure, necessitates a heavy burden of taxation on the country, and in view of the actual results of such Government operation of railroads both in Canada and the United States;

"Be it resolved that this general meeting of the members of the Province of Quebec Division of the Canadian Manufacturers Association, held in Montreal, on October the 16th, places itself on record with the Dominion Government as being unalterably opposed to the contemplated acquisition and operation by the Government of the Grand Trunk Railway."

The Secretary was instructed to communicate the same by wire to Sir George Foster, the Acting Prime Minister, and this was done immediately.

Compulsory Education

Prof. J. A. Dale, of McGill University, gave a scholarly address on compulsory education in Quebec Province, in which, while avoiding racial and religious differences, he pointed out the necessity for a general compulsory system of education, in order that all children might be given equal opportunity, not merely in their own interests, but in those of the State.

His argument was ably seconded by Mr. W. E. Patenaude, who told of the work of the Board of School Commissioners in securing a proper attendance at school, especially of children of the earlier grades. Mr. Patenaude supported the idea of compulsory education, as designed to give all the youth of the country opportunity to develop their talents to their own interests and those of the State.

Following these addresses the President, Mr. T. P. Howard, spoke most eloquently to the members on Association matters. In part he said: "Our Association is looking for peace, not fight. But if a fight should come we want to be ready, whether it is a fight on the tariff or on the buying of the Grand Trunk. When I was elected your president I said we had been doing too much pussy-footing, and I repeat it now. We represent the largest and most important body in Canada, and we should be prepared to take a decided stand, whether on matters of compulsory education, industrial relations or the labor problem. As to the latter, some people think we are out to fight labor interests. We are not. On the contrary, we are out to do everything we possibly can to work harmoniously with them. Our Industrial Committee is doing everything possible for peace, but if we must fight we will fight standing up, not lying down. If the Canadian Manufacturers Association is to be licked it will be licked standing up, not lying down."

Proceeding, Mr. Howard sketched the growth of the C.M.A. from its organization in 1872 to its present membership of 3,700, with divisions in Ontario and Quebec, and hoped for a membership of 5,000 for which he asked those present to work. As to the divisional organizations, Mr. Howard stated they had been formed for provincial purposes. The Quebec division would work for Quebec interests, and the Ontario division for its interests, subject to the general jurisdiction of the Association. In this Mr. Howard drew special attention to the manner in which the French and English-speaking members in the Province were working together.

Brief addresses were given by others connected with the C.M.A. work. Throughout the dinner an excellent entertainment programme was enjoyed by one and all, and expressions of opinion were heard on all sides to the effect that the day's work had been highly satisfactory, and that the first convention augured well for the future of the Division.

Organization of Ontario Division Completed

By H. MACDONALD
Secretary, Ontario Division

THE organization meeting in connection with the formation of the Ontario Division of the C.M.A. was convened in the King Edward Hotel, Toronto, on Thursday, October 16. There was a large and representative attendance of manufacturers, including quite a number from points outside Toronto.

Mr. Thos. Roden, Chairman of the Organization Committee, presided, and after luncheon explained that by amendment of the Association by-laws passed at the last annual meeting of the Association, members located within the Province of Ontario were created an Ontario Division of the Association. This, however, did not affect the branch organizations as at present constituted. The chief reasons for the change were uniformity in district organization. There were now the Maritime, the Quebec, the Ontario, the Prairie Provinces and the Pacific Divisions, and closer co-operation among the members so located was desirable. As a result of the new organization, members within a Division will be enabled, through their duly elected officers and committees, to deal with matters of common interest, such as provincial legislation, industrial conditions within the Province, policies of the Association as they affected the Divisional members, etc.

The scheme had been inaugurated at a meeting of representative Ontario manufacturers held in Toronto, on 20th March last, which had carefully considered the situation, and after submitting a report to the Executive Committee of the Association, it had been referred to, and had received the unanimous approval of the Association at the last annual meeting.

Apologies for absence having been intimated from: Senator Nicholls, Canadian General Electric Co., Limited; Arthur Hewitt, Consumers' Gas Co. of Toronto, Ltd.; Adam Hall, Pres. Adam Hall, Limited, Peterborough; Ingersoll Packing Co., Ltd. Ingersoll; John Goodison Thresher Co., Ltd., Sarnia; Cyrus A. Birge, Steel Co. of Can., Ltd., Hamilton; A. W. White, Geo. White & Sons Co., Ltd., London; Geo. D. Forbes, A. R. Forbes Co., Ltd., Hespeler; the Chairman submitted the following report of the Organization Committee:

At a conference of representative Ontario members held in Toronto on March 20, 1919, it was unanimously agreed that the Association should now begin a period of intensive organization. During the past seventeen years, a frame work has been created from coast to coast, with branches covering all the provinces; now the frame work needs a certain amount of enlargement and consolidation, in order to achieve its maximum effectiveness. A proposal to group the membership of the Association for administrative purposes into divisions, was accordingly considered and after full discussion, the following motion was unanimously carried:

"That this meeting, having regard to the problem of increasing the membership of the Association, recommend to the Executive Committee the advisability of creating a Provincial organization, to be known as the 'Ontario Division' of the Association, to include present branches or subbranches in Toronto, Hamilton, Niagara Falls, and Brantford, and any additional branches which may subsequently be organized, to deal with matters having a Provincial application, leaving to the local organizations such matters as affect

them locally, and that the by-laws of the Association be amended and enlarged accordingly."

This resolution being approved by the Executive Committee, was submitted to the annual general meeting, held in Toronto in June last, and unanimously adopted, the membership of the Association being divided into five divisions; and by amendment of the Association by-laws then passed, members located within the Province of Ontario were created an Ontario Division of the Association, without, however, affecting the branch organizations as at present constituted.

Your Committee believe that the formation of branches in all the chief industrial centres will do much, not only to increase the membership of the Association, but also to stimulate thought on industrial matters.

All of which is respectfully submitted,

THOS. RODEN,
W. R. BREYFOGLE,
A. KINZINGER,
H. H. CHAMP,
H. W. FLEURY.

Toronto, October 16, 1919.

The Chairman then laid emphasis on the necessity of more intensive provincial organization for the purpose of dealing with purely provincial matters, such as Education, Workmen's Compensation, and Fire Prevention, which were largely administered under provincial law; also prospective legislation, such as Minimum Wage Law, Factory Legislation, etc.

On motion by Mr. Coulter, seconded by Mr. J. P. Murray, the report was unanimously received and adopted.

On motion by Mr. Coulter, seconded by Mr. J. P. Murray, the following resolution was submitted, and unanimously passed:

"Whereas by amendment of the Association by-laws passed at the last annual meeting, members in the Province of Ontario were created an Ontario Division of the Association (without affecting the branch organizations as heretofore constituted), to be operated under the said by-laws;

"Therefore, be it resolved, that a Division Executive Committee be and is hereby constituted, consisting of a Chairman, a Vice-Chairman and twenty elected members, together with the Chairman of each branch within the Province of Ontario, seven to constitute a quorum for meetings of such Executive Committee."

The Committee on Nominations having submitted a list of thirty-three nominees, Messrs. J. M. McIntosh and W. J. Larkin of the head office staff were appointed scrutineers.

The Chairman announced, upon a report by the scrutineers, that the following officers had been returned, and they were accordingly declared elected:

Chairman:

Douglas, Geo. H. ..... Thornton & Douglas, Ltd., Hamilton (by acclamation).

Vice-Chairman:

Shaw, J. R. ..... Canada Furniture Mfrs., Ltd., Woodstock (by acclamation).

Division Executive Committee (20):

Brigden, George ..... Brigdens, Ltd., Toronto.
Carlistle, C. H. ..... Goodyear Tire & Rubber Co., Ltd., Toronto.
Cockshutt, Gordon C... Slingsby Mfg. Co., Ltd., Brantford.
Cowan, W. ..... Cowan & Co., Ltd., Galt.
Dillon, T. J. ..... Canada Foundries & Forgings, Ltd., Welland.
Fleury, H. W. ..... J. Fleury's Sons, Aurora.
Freyseng, E. J. ..... Freyseng Cork Co., Ltd., Toronto.
Gray, Robert ..... Wm. Gray Sons Co., Ltd., Chatham.
Harris, Sam ..... Harris Lithographing Co., Ltd., Toronto.
Hatch, Fred ..... The Hatch Mfg. Co., Whitby.
Inglis, Wm. ..... John Inglis Co., Ltd., Toronto.
McGregor, G. M. ..... Ford Motor Co. of Canada, Ltd., Ford.
Millar, John ..... Lever Bros., Ltd., Toronto.
Monypenny, T. F. ..... Imperial Varnish & Color Co., Ltd., Toronto.
Paige, J. F. ..... Pt. Arthur Shipbuilding Co., Ltd., Pt. Arthur.
Roden, Thomas ..... Roden Bros., Ltd., Toronto.
Waddie, H. J. ..... Canadian Drawn Steel Co., Ltd., Hamilton.
Williams, Sam. J. .... The Williams, Greene & Rome Co., Ltd., Kitchener.
White, A. W. ..... The George White & Sons Co., Ltd., London.
Whitton, Frank ..... Steel Co. of Canada, Ltd., Hamilton.

Chairmen of Ontario Branches, Members Ex Officio:

Coulter, W. C. ..... Booth-Coulter Copper & Brass Co., Ltd., Toronto.
Douglas, Geo. H. ..... Thornton & Douglas, Ltd., Hamilton.
(Note.—Mr. Douglas is Division Chairman.)
Blew, E. R. ..... Spirella Co. of Canada, Ltd., Niagara Falls.
Waterous, C. H. ..... Waterous Engine Works Co., Ltd., Brantford.
(25 members.)

On motion by Mr. Douglas, seconded by Dr. D. Strachan, the following resolution was submitted and carried unanimously:

"That the Ontario Division Executive Committee be and is hereby authorized and empowered to elect committees as follows, that is to say:

(1) Educational Committee,
(2) Legislation Committee,
(3) Transportation and Power Committee,
(4) Publicity Committee.

"And such further or additional committees and sub-committees as it may deem proper or necessary with such powers, and consisting of such number respectively, as it may agree upon for the due and proper discharge of the business of the Division.'"

Sir Henry Drayton, K.C., M.P., Minister of Finance, being introduced by the Chairman, addressed the manufacturers on the financial standing of Canada and invited their co-operation in completing the projected Government loan, which he characterized as essentially a war loan. He bore ready testimony to the devotion and patriotism of Canadian manufacturers and felt sure that their co-operation would be not less hearty than on all former occasions. In reply, Mr. Roden assured Sir Henry of the fullest support of the Association.

On motion by Mr. Frank H. Mutton, seconded by Dr. D. Strachan, the following resolution was submitted and carried unanimously:

"Whereas it is expedient that the Association should at once consider the organization of a permanent Department of Industrial Relations to study the relations existing between employers and employees, to gather data to supply industrial statistics and other information, and to be prepared to furnish expert advice and assistance in connection with any further Industrial Conferences or otherwise;

"Therefore, be it resolved, that the Ontario Division of the Canadian Manufacturers Association in general meeting assembled, recommend to the Executive Committee of the Association, that the Industrial Relations Committee be requested to report fully on the desirability of such an organization and outline a plan for its operation."

Mr. J. F. MacKay stated that the Publishing Committee of the Association, of which he is Chairman, would welcome any assistance from the Ontario Division. He also emphasized the value of publicity, urging that this matter should receive full consideration.

Mr. T. F. Monypenny suggested that the co-operation of Mr. J. F. MacKay and Mr. J. J. Gibbons should be enlisted in furtherance of a substantial publicity campaign. All rival interests were active in this respect—this Association alone excepted.

Mr. Douglas pointed out, however, that the operation of a Publicity Department required funds, and that the Executive must be careful not to conflict with the function of the Executive Council in its operation, but assured the meeting that the matter would receive full consideration.

Mr. Freyseng strongly urged the desirability of increasing the membership, and expressed the hope that there would be a large accession to the membership in the Ontario Division as the result of the new organization.

Mr. Roden then welcomed Mr. George H. Douglas to the Chairmanship of the Division for the ensuing year, who on taking the chair, was received with hearty applause. Mr. Douglas stated that he had just returned from taking part in a highly successful trip to the Eastern provinces, and that he had received ample evidence of the appreciation with

which all the Departments of the Association were regarded by members generally. The Ontario Division especially offered prospects of very great development. It was the chief centre of Canada's industries and might well be described as the banner Province of Canada. With such a representative and well-distributed Executive, he was quite sure that they were capable of performing excellent service to the manufacturers. He looked forward to the organization of branches in the chief centres, and whatever co-operation he and his Executive could give in this direction would be heartily at the command of all the members in their territory.

On motion by Mr. J. P. Murray, seconded by Mr. Parsons, a hearty vote of thanks was accorded to Mr. Roden for his valuable work as Chairman of the Organization Committee, leading up to this convention, and also for the active and intelligent interest he took in all matters affecting the welfare of the Association. Mr. Roden expressed his sincere thanks for this expression of appreciation of his co-members. Mr. G. H. Lees, at the same time, moved a hearty vote of thanks to the members of Toronto branch for their hospitality in entertaining the out-of-town members to luncheon.

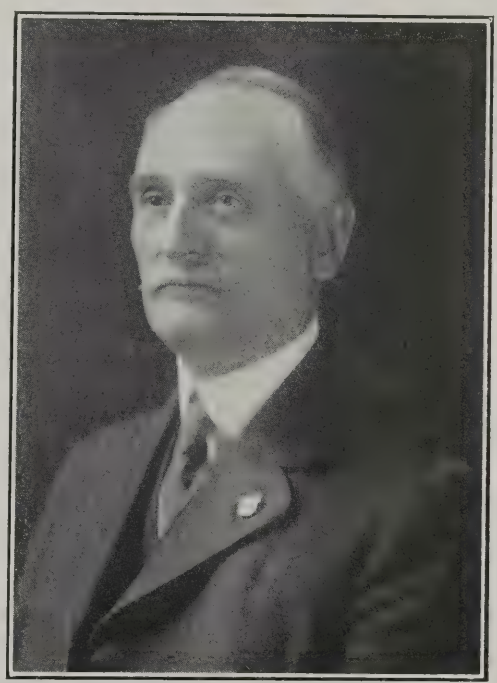
At this stage, a telegram was read from President T. P. Howard, conveying congratulations to the Chairman of the Ontario Division, intimating the election of Mr. G. H. Duggan as Chairman, and Mr. C. Howard Smith as Vice-Chairman of Quebec Division. The Chairman intimated that he had also wired congratulations to Mr. Duggan on his election as Chairman of Quebec Division at its first organization meeting held in Montreal that day.

Mr. C. H. Carlisle, of the Goodyear Tire & Rubber Co., Limited, Chairman Industrial Relations Committee, delivered an interesting address in which he reminded the manufacturers that Socialism had been often tried in the United States and other countries, as well as in the British colonies, and had proved a failure. Referring to the question of publicity, Mr. Carlisle stated that the Association is behind every other organization in the city in this respect. One of the largest payers of taxes and reflecting the industrial life of the country—yet they have no adequate publicity! They had a great work in reaching the people of this country by well-directed publicity and inculcating the view that by production, fair-dealing and saving alone, could success be achieved. If this requires money, his advice was "Get it." It would be given and it would be a good investment. To such subjects as wise legislation, a system of scientific tariffs and discriminate consideration of the claims of labor, careful and systematic attention must be given. Only by letting people know what we are doing, could we hope to get a better co-operation.

Mr. J. S. McKinnon, 1st Vice-President, stated that much of the criticism to which they were subjected in the past was due to lack of knowledge of the aims and aspirations of the Association. What we want most of all is production, and it should be recognized and appreciated that an Association of business men, embracing from 3,000 to 4,000, devoting their time and brains to develop the industries of this country, was a very important factor towards present and future prosperity.

We are interested in the tariff because we are interested in Canadian industries. He hoped some good would come out of the National Industrial Conference recently held in Ottawa. It was not expected that a solution of all questions could be reached in one conference in the course of five days. Responsibility rested on labor equally with employers. The wheels of industry were being clogged by the uncertainty created in the various parts of the Dominion, owing to labor disputes, and the sooner all classes realized that only by whole-hearted co-operation and production could we finally win, the better for the country.

Ex-President S. R. Parsons spoke on the statesmanship-like conclusions being reached by the present Industrial Relations Committee sitting at Washington. When all classes looked to the public welfare rather than to selfish interests, then would the country assuredly reach the goal of prosperity.



Mr. G. H. Douglas

Well-known Hamilton Manufacturer who was honored with election to the chairmanship of the new Ontario Division, C.M.A.

The Secretary announced that the National Conference on Character Education in relation to Canadian citizenship, would be held in Winnipeg from October 20th to 22nd and members of the Association were invited. Mr. W. J. Bulman, Ex-President of the Association, it was explained, was the originator of the Conference which was certain of a large attendance.

The Ontario Division Executive Committee met immediately after the Organization meeting.

Present—Messrs. Geo. H. Douglas (Chairman), Thos. Roden, W. C. Coulter, T. F. Monypenny, Ed. J. Freyseng, and Sam. J. Williams.

Mr. H. Macdonald, Legal Secretary of the Association is also Secretary of the Ontario Division.

The meeting discussed the appointment of sub-committees and questions of general policy.

Mr. C. H. Carlisle of the Goodyear Tire & Rubber Co., Limited, was appointed a member of our "Committee of Approval" of the Hydro-Electric Power Commission, to deal with the question of approval of electrical fittings, fixtures, devices, etc., as representing consumers.

The following members from outside Toronto were present at the meeting:

Bertram, Henry	John Bertram & Sons Co., Ltd., Dundas.
Breyfogle, W. R.	The De Laval Co., Ltd., Peterboro.
Douglas, G. H.	Thornton & Douglas Co., Ltd., Hamilton.
G. T. Dunn	Canadian Steel & Wire Co., Ltd., Hamilton.
Gain, J. H.	Brantford Roofing Co., Ltd., Brantford.
Gernandt, F. J.	International Harvester Co., Hamilton.
Gormely, F. P.	Union Carbide Co. of Canada, Welland.
Harmer, R.	Sawyer-Massey Co., Ltd., Hamilton.
Hatch, F.	The Hatch Mfg. Co., Ltd., Whitby.
Hatt, H. L.	Welland Machine & Foundries, Welland.
Hodgins, F. S.	Williams, Greene & Rome Co., Kitchener.
Lees, Geo. H.	Geo. H. Lees & Co., Ltd., Hamilton.
Lees, W. W.	Geo. H. Lees & Co., Ltd., Hamilton.
Lovejoy, F. C.	Cross Press & Sign Co., Woodstock.
McCormick, B. J.	Canada Foundries & Forgings, Welland.
McCredie, A. L.	A. L. McCredie, Ltd., St. Marys.
Notman, J. C.	McKinnon Dash Co., St. Catharines.
Piper, J. C.	Robert H. Hassler, Ltd., Hamilton.
Ritchie, C. N.	Ritchie Cut Stone Co., Ltd., Hamilton.
Schultz, W. D.	Schultz Bros. Co., Ltd., Brantford.
Westbye, P. B.	Wm. Hamilton Co., Ltd., Peterboro.
Williams, S. J.	Williams, Greene & Rome Co., Kitchener.
Waterman, H. E.	Secretary, Hamilton Branch. Hamilton.

Statement of Principles by U.S. Employers

As Submitted to the Industrial Conference at Washington, D.C.

President Wilson of the United States summoned a National Industrial Conference to meet at Washington, D.C., on October 6th, 1919. The Conference was divided into three groups, one representing employers, one labor and one the public. This Conference was conducted along different lines to that of the National Industrial Conference held in Ottawa, September 15th to September 20th. The Canadian Conference was more in the nature of a small parliament called together to discuss certain industrial subjects. The United States Conference appears to have been a conference consisting of a small group from each of the three interests involved, who were summoned into personal conference with the President. This arrangement, owing to the President's illness, was changed to some extent. The subjects under discussion, however, were very similar. The Employers' Group, consisting of the representatives of the Chamber of Commerce of the United States, the Investment Bankers' Association, the Railroad Executives, the National Grange, the American Society of Equity, the Farmers' Co-operative Union and the National Industrial Conference Board, prepared and presented a statement of principles which they submitted should govern the employment relation in industry. This statement of principles was as follows:

SOUND industrial development must have as its foundation productive efficiency, and high productive efficiency requires not only energy, loyalty, and intelligence on the part of management and men, but sincere co-operation in the employment relation, based upon mutual confidence and sympathy.

This is true of all producing industries, large and small, of the farming industry as well as the manufacturing. While there are differences between the different branches of industry which call for special application of the underlying principles, these principles are the same in all.

Without efficiency in production, that is to say, without a large product economically produced, there will be no fund for the payment of adequate compensation for labor, management and capital, and high cost of living will inevitably continue. Moreover, without such efficiency it will be impossible for American industry successfully to compete in foreign markets or with competition in this country. The larger and more effective the production, the greater will be the return to all engaged in the industry and the lower the cost of living.

The requisite efficiency in production cannot be secured unless there is effective co-operation between employer and employee, such as is only possible where, with a full understanding of each other's point of view, management and men meet upon a common ground of principle and in a spirit of co-operation based upon good understanding and a recognition of what is fair and right between the two. Then only can there be that harmony which will insure the prosperity of those engaged in industry and of all the people.

With full recognition of the vital importance of these conditions, and with due realization of the great responsibility resting upon management to secure their practical application in industrial affairs, we submit the following principles which we regard as fundamentally sound in the interest of industry, of those employed or concerned in industry, and of the people as a whole.

1. *Production.*—The industrial organization as a productive agency is an association of management, capital, and labor voluntarily established for economic production through co-operative effort. It is the function of management to co-ordinate and direct capital and labor for the joint benefit of all parties concerned and in the interest of the consumer and of the community. No employment relation can be satisfactory or fulfil its functions for the common good which does not encourage and require management and men to recognize a joint as well as an individual obligation to improve and increase the quantity of production to as great an extent as possible, consistent with the health and well-being of the workers.

There should be no intentional restriction of productive effort or output by either the employer or the employee to create an artificial scarcity of the product of labor in order to increase prices or wages; nor should there be any waste of the productive capacity of industry through the employment of unnecessary labor or inefficient management.

It is the duty of management on the farms and in industry and commerce, as far as possible, to procure the capital necessary for the increased production that is required, and of both management and labor to co-operate to promote the use of capital in the most efficient fashion.

2. *The Establishment as a Productive Unit.*—Recognizing the co-operative relationship between management and men essential to productive efficiency as a prerequisite for national and individual well-being, the establishment rather than the industry as a whole or any branch of it should, as far as practicable, be considered as the unit of production and of mutual interest on the part of employer and employee. Here, by experimentation and adaptation, should be worked out and set up satisfactory means for co-operative relations in the operation of the establishment, with due regard to local factors.

Each establishment should develop contact and full opportunity for interchange of view between management and



—"American Industries"

The Up-to-date Engine Room

men, through individual or collective dealing, or a combination of both, or by some other effective method, always predicated on both sides on honesty of purpose, fairness of attitude, and due recognition of the joint interest and obligation in the common enterprise in which they are engaged.

Mere machiney is not enough for this purpose. There must also be sympathy and good will, with earnest intent that, whatever the means employed, they must be effective.

Safe and Satisfactory Conditions

3. *Conditions of Work.*—It is the duty of management to make certain that the conditions under which work is carried on are as safe and as satisfactory to the workers as the nature of the business reasonably permits. Every effort should be made to maintain steady employment of the workers both on their account and to increase efficiency. Each establishment should study carefully the causes of unemployment, and individually and in co-operation with other establishments in the same and other industries should endeavor to determine and to maintain conditions and business methods which will result in the greatest possible stability in the employment relation.

4. *Wages.*—While the law of supply and demand must inevitably play a large part in determining the wages in any industry or in any establishment at any particular time, other conditions must be taken into account such as the efficiency of the worker, and the wage standard of the industry in the locality. The wage should be so adjusted as to promote the maximum incentive consistent with health and well-being and the full exercise of individual skill and effort. Moreover, the business in each establishment and generally in industry should be so conducted that the worker should receive a wage sufficient to maintain him and his family at a standard of living that should be satisfactory to a right-minded man in view of the prevailing cost of living, which should fairly recognize the quantity and quality of his productive effort and the value and length of his service, and reflect a participation on his part in the prosperity of the enterprise to which he is devoting his energy.

Many plans are now under consideration for adding to the fixed wage of the worker, such, for example, as bonus payments, profit-sharing, and stock ownership. All such plans should be carefully studied in each establishment. It may well be that in many instances the employer and the employee could work out an arrangement of such a character to their mutual advantage.

Employment Suited to Ability

In order that the worker may in his own and the general interest develop his full earning capacity and command his maximum wage, it should be a primary concern of management to assist him to secure employment suited to his abilities, to furnish him incentive and opportunity for improvement, to provide proper safeguards for his health and safety, and to aid him to increase the value of his productive effort.

Where women are doing work equal with that of men under the same conditions, they should receive the same rate of pay as men, and should be accorded the same opportunities for training and advancement.

5. *Hours of Work.*—Hours of work schedules should be fixed and his right to an adequate period of leisure for rest, recreation, home life, and self-development. To the extent that the work schedule is shortened beyond this point the worker as well as the community must inevitably pay in the form of a reduced standard of living.

The standard of the work schedule should be the week, varying as the peculiar requirements of individual industries may demand. Overtime work should, as far as possible, be avoided, and one day of rest in seven should be provided.

6. *Settlement of Disputes.*—Each establishment should provide adequate means for the discussion of all questions and the just and prompt settlement of all disputes that arise between management and men in the course of industrial operation, but there should be no improper limitation or impairment of the exercise by management of its essential function of judgment and direction.

7. *Right to Associate.*—All men have the right to associate voluntarily for the accomplishment of lawful purposes by lawful means. The association of men, whether of employers, employees, or others, for collective action or dealing confers no authority and involves no right of compulsion over those who do not desire to act or deal with them as an association. The arbitrary use of such collective power to coerce or control others without their consent is an infringement of personal liberty and a menace to the institutions of a free people.

8. *Responsibility of Associations.*—The public safety requires that there shall be no exercise of power without corresponding responsibility. Every association, whether of employers or employees, must be equally subject to public authority and legally answerable for its own conduct or that of its agents.

Principle of Individual Freedom

9. *Freedom of Contract.*—With the right to associate recognized, the fundamental principle of individual freedom demands that every person must be free to engage in any lawful occupation or enter into any lawful contract as an employer or an employee, and be secure in the continuity and rewards of his effort. The freedom of a man to work is as sacred as is his freedom to religious worship and must not be subject to restriction or menace.

The only qualification to which such liberty of contract is subject lies in the power of the state, within limits imposed by the Constitution, to regulate in the public interest, for example, for the promotion of health, safety, and morals.

10. *The Open Shop.*—The principles of individual liberty and freedom of contract upon which our institutions are fundamentally based require that there should be no interference with the "open shop," that is, the shop in which membership or non-membership in any association is not made a condition of employment. While fair argument and persuasion are permissible, coercive methods aimed at turning the "open shop" into a "closed union" or "closed non-union shop" should not be tolerated.

There should be no denial of the right of an employer and his workers voluntarily to agree that their relation shall be that of the "closed union shop" or of the "closed non-union shop." But the right of the employer and his men to continue their relations on the principle of the "open shop" should not be denied or questioned. No employer should be required to deal with men or groups of men who are not his employees or chosen by and from among them.

Under the organization of the "open shop" there is not the same opportunity for outside interference on the part of other interests to prevent close and harmonious relations between employer and employee. Their efforts to continue or secure such harmonious relationship are not complicated to the same extent by intervention of an outside interest which may have aspirations and plans of its own to promote, which are not necessarily consistent with good relations in the shop.

11. *The Right to Strike or Lockout.*—In the statement of the principle that should govern as to right to strike or lock-

(Continued on page 142)

Extent and Scope of the C.M.A. Organization

Illustrated by a Series of Twenty-Five Views

FOR the benefit of the many members of the Canadian Manufacturers' Association who have been unable for various reasons to familiarize themselves personally with the appearance and work of the several offices and departments of the Association, a series of photographs has recently been taken illustrating the extent of the organization. These photographs appear on the following pages. They will undoubtedly be found impressive by reason of the manner in which they portray the widespread activities of the C.M.A. and the varied services rendered by this great national Association.

Since similar illustrations were published five years ago, there have been notable developments in the organization. At that time the membership was 3,100; it is now 3,615. There were then exclusive of the Insurance Department, 25 persons on the pay-roll, giving their entire time to the work; there are now 40 persons similarly employed. With the exception of the Montreal office, the various branch offices now located in Montreal, Winnipeg, Vancouver, Amherst and Ottawa had not yet been organized on their present comprehensive basis nor had the formation of provincial divisions even been contemplated. The facilities provided and services rendered were in practically every respect inferior to those of the present day.

The Association is on the eve of further intensive organization. With the formation in October of the Ontario and Quebec Divisions, each with its own chairman, vice-chairman, executive committee and special committees, the task of organizing the Association by provinces has been completed. There now exists the Pacific Division, comprising the province of British Columbia; the Prairie Division, taking in the provinces of Alberta, Saskatchewan and Manitoba; the Ontario and Quebec Divisions, covering these two provinces respectively and the Maritime Division, extending over the provinces of New Brunswick, Nova Scotia and Prince Edward Island.

It remains to round out the work by forming branches in all the important industrial centres where such branches do not now exist. A good start has been made but much remains to be done. The following cities have already been organized---in the Pacific Division, Vancouver and Victoria; in the Prairie Division, Winnipeg, Brandon, Regina, Medicine Hat, Saskatoon, Calgary and Edmonton; in the Ontario Division, Toronto, Hamilton, Brantford and Niagara Falls; in the Quebec Division, Montreal, Quebec and Sherbrooke. There are no branches so far in the Maritime Provinces, though several will likely be formed in the near future.

THE GENERAL MANAGER



MR. J. E. WALSH AT HIS DESK

THE senior officer of the Association's salaried staff, under whose direction all other paid officers carry on their work, bears the title of General Manager. His duties, as defined by the constitution, require him to keep a correct list of the members and their addresses and a true and accurate record of all proceedings. He is required to conduct the correspondence of the Association and collect and carefully preserve all books, papers, letters and documents relating to or of interest to the Association. To him is entrusted the custody of the seal of the Association, and it is incumbent on him to perform all duties which the nature of his office may require or the Executive Committee may order.

Since its creation at the first of the present year, the office of General Manager has been held by Mr. J. E. Walsh, who was formerly manager of the Association's Transportation Department. Mr. Walsh commenced his business career with the Canada Atlantic Railway and remained in the service of that road for twenty years, passing through all departments. Then he served for a time as assistant to the general manager of the Richelieu & Ontario Navigation Company, obtaining experience in the field of water transportation. On leaving the R. & O. he was engaged by the Federal Government on the Georgian Bay survey. Finally his connection with the C.M.A. began in 1907, when he was invited to take charge of the newly-created Transportation Department. His work in this connection is too well known to the members to require any elaboration. He has made the department of great service to the membership and has demonstrated the advantage of having available the services of an expert. Mr. Walsh, in addition to his other duties as General Manager, continues to supervise personally the work of the Transportation Department.

THE GENERAL SECRETARY



MR. J. T. STIRRETT

ON the institution of the office of General Manager, a new position was created, to which was given the name of General Secretary. The duties of this office embrace the oversight and correlation of all the secretarial work of the Association divisions, its branches and committees, The position is held by Mr. J. T. Stirrett. Mr. Stirrett is a graduate in Arts of the University of Toronto. After completing his college course he spent three and a half years in daily newspaper work, which included one session in the Press Gallery of the House of Commons. In 1912 he joined the staff of the Association as editor of INDUSTRIAL CANADA. He enlisted in the Canadian Expeditionary Force in November, 1915, and, after going through the usual course of training in Canada and England, served one year in France. He was discharged on demobilization in January, 1919. After receiving his discharge he resumed his duties on the staff of the Association, and following the reorganizaton of the office staff which took place at that time, was appointed to his present position as General Secretary at the head office.

THE TARIFF DEPARTMENT



MR. J. R. K. BRISTOL, MANAGER

THIS photograph shows the office of the Manager of the Tariff Department, Mr. J. R. K. Bristol. This Department can be of great service to members in handling the many difficult and complicated problems arising in connection with the Tariff. The Manager is in a position to assist with all questions connected with departmental rulings, decisions of the Board of Customs, orders-in-council entries, post entries, dump duties, refund, drawbacks, seizures, etc. Mr. Bristol has had life-long experience in tariff matters, having been twenty-three years in the Customs Service at Ottawa before becoming Manager of the Tariff Department in 1912. He acted as private Secretary to Hon. N. Clark Wallace and Hon. John F. Woods, comptrollers of customs, was later member of the Board of Customs, has served as an Inspector of Customs, as Chief Dominion Appraiser and as member of the Statistical Commission which classified the statistics issued by the Dominion Government. His exceptional qualifications for his work in the Association are too apparent to call for explanation.

THE LEGAL DEPARTMENT



MR. H. MACDONALD, SECRETARY

THE Association's Legal Department performs numerous useful functions. It makes a careful study of all legislation passing through the Dominion and Provincial Parliaments, and where necessary advises action in the interests of manufacturers. It is always available for consultation on any legal point and its services are at the disposal of members for advice on company law, the incorporation of companies, and all matters affecting the transaction of business. The Secretary of the Department is Mr. H. Macdonald, whose legal training was obtained in the Universities of Aberdeen and Edinburgh. After practising for some years in Edinburgh, Mr. Macdonald came out to Canada, and for a time practised law in Toronto. He joined the C.M.A. as assistant general secretary in 1915, and for a time acted as general secretary during the absence of Mr. Murray.

THE COMMERCIAL INTELLIGENCE DEPARTMENT



MR. ALEX. MARSHALL, MANAGER

A DEPARTMENT of the Association's work which has been increasing very noticeably in importance during the past few years is that devoted to the compilation and dissemination of Commercial Intelligence. This Department had its nucleus in the CANADIAN TRADE INDEX, a volume published by the Association every two or three years and containing a classified list of all articles manufactured in Canada. In addition to the important task of preparing the INDEX, the Department provides a storehouse of information on many phases of the industrial life of the country and is particularly well posted on problems of export trade. Its services are at the disposal of members whenever trade questions are under consideration. The Department is managed by Mr. Alexander Marshall, a graduate of the University of Toronto, who has been engaged in this work since 1912.

INDUSTRIAL CANADA DEPARTMENT



MR. D. B. GILLIES, BUSINESS MANAGER; MR. W. A. CRAICK, EDITOR

AS the medium through which the policies of the Association are advocated, its work made known to the membership and the industrial progress of the country recorded, INDUSTRIAL CANADA plays an important part in the work of the organization. There is here shown the joint office of the business manager and the editor. Mr. D. B. Gillies, the business manager, is a graduate of the University of Toronto, who has had lengthy experience in the publishing field, first in daily newspaper work, then with magazine and specialized class publications. Mr. W. A. Craick, the editor, also a graduate of the University of Toronto, has had many years' experience in journalism, both as a writer of special articles and in the editing of magazines and class publications.

THE ACCOUNTING DEPARTMENT



MR. JOSEPH WINFIELD, OFFICE MANAGER

IN a big organization like that of the C. M. A., the accounting department naturally occupies an important place. The task of collecting the fees and handling the accounts for an institution of such proportions is no small one. The man in charge of this work and who, in addition, acts as office manager, is Mr. J. W. Winfield. Mr. Winfield enjoys the distinction of being the oldest employee of the Association in point of service. He joined the staff in 1900 as office boy, and in the interval has risen to his present responsible position. Besides keeping the accounts, Mr. Winfield looks after the membership roll and performs various other necessary duties in the organization.

THE TRANSPORTATION DEPARTMENT



MR. S. B. BROWN, ASSISTANT MANAGER

THIS is the department which deals with the transportation problems of the manufacturers of Canada. Freight and express rates, bills of lading, demurrage and other rules, freight classification and conditions of carriage, minimum carload weights, siding agreements, telegraph forms and many other matters are constantly arising and calling for attention. As the adjustment of such problems is extremely technical, the work of the department is entrusted to recognized experts. Mr. J. E. Walsh, though now general manager of all departments, still holds the position of manager of this particular department, giving members the benefit of his long experience in transportation matters. The bulk of the work, however, falls on the shoulders of Mr. S. B. Brown, the assistant manager, and his staff, now numbering five persons. Mr. Brown entered the service of the Association in 1912 as assistant to Mr. Walsh, becoming assistant manager of the department when the latter became general manager. Prior to joining the Association, he had eight years of valuable experience first in Ottawa in the local freight and freight traffic departments of the Ottawa and New York Railway and later in New York in the freight traffic department of the New York Central & Hudson River Railway.

The work of the department comes under the direction of the Transportation Committee of the Association, which is empowered to give attention to all matters affecting transportation and communication which may from time to time become of importance to the trade and commerce of Canada. Especially is it required to protect the interests of members in regard to the classifications and tariffs of freight and conditions, contracts, practices and regulations under which freight is weighed, handled, moved, stored, loaded and unloaded.



MR. G. P. RUICKBIE, TRAFFIC REPRESENTATIVE

One of the important duties performed by officers of the department is to represent the interests of manufacturers before the Dominion Board of Railway Commissioners and other bodies concerned with transportation matters. Both Mr. Walsh and Mr. Brown frequently appear before these boards, and in the past have achieved valuable results for the membership.

In the lower illustration is shown the office of Mr. Ruickbie, who is the traffic representative of the Canadian Pulp & Paper Association and works in close conjunction with the Transportation Department of the C.M.A. Mr. Ruickbie was appointed to this office in 1919, after twenty years in the service of the freight department of the C.P.R.

THE TRADE SECTIONS DEPARTMENT

THE Trade Sections' Department stands ready to supply a secretarial and organizing service to any group of manufacturers who may desire to organize along lines of production for the purpose of dealing with common problems incidental to the trade. All that is required to start the ball rolling is the indication of a motive incidental to a particular trade upon which united action may be considered desirable. If members report such matters to the Department, meetings will be speedily arranged in any of the cities in which the Association maintains a staff. The manager of this Department is Mr. J. M. McIntosh, who was for several years prior to the war secretary of the Toronto Branch, and who on his return from active service was appointed to his present position. Prior to entering the employ of the Association Mr. McIntosh was engaged in banking. He entered that business early in life and rose through the various departments to the managership of the Dominion Bank at Brandon, Man., where he was stationed for five years. He also saw considerable service in Winnipeg and Toronto, spending nineteen years in all in banking.



MR. J. M. McINTOSH, MANAGER

The lower illustration shows a section of the general office, with the library in the background. In the foreground is seated Mr. F. R. Allward, chief clerk of the Transportation Department. Mr. W. J. Larkin, filing and tariff clerk of the same department, stands at the filing cabinet, and seated in the background is Mr. T. M. Kerruish, assistant to the manager of the Commercial Intelligence Department. Mr. Kerruish saw active service with the Royal Air Force. In the library are filed government reports, reference books of all sorts, text books bearing on economics, magazines, newspapers, trade and class publications.



SECTION OF GENERAL OFFICE

It may be interesting to note that the space shown in this picture comprised practically the whole of the general office in 1914 and, in fact, was so occupied up to two years ago, when the business of the Association grew to such proportions that the space shown on the following page had to be taken in to provide necessary additional room. As it is, the Association to-day occupies all but a small corner of the entire fourteenth flour of the Bank of Hamilton Building (formerly the Traders Bank Building), the private offices extending along the south side of the building and the general offices, board room and insurance department, the rest of the space. All the office equipment in the way of desks, typewriters, filing cabinets and other apparatus are of the most modern and efficient design and each private office has its own telephone.

THE INSURANCE DEPARTMENT



GENERAL OFFICE OF THE INSURANCE DEPARTMENT

BY arrangement with the insurance firm of Willis, Faber & Co., members of the Association are entitled to receive expert advice on all matters pertaining to insurance as part of their Association privileges. One of the three offices occupied by this firm is shown in the illustration, the manager, Mr. Slater, being seen standing in the background. These offices form part of the head office suite of the C.M.A. and are in effect a department of the organization. Quite a large staff of assistants and stenographers are employed.

THE GENERAL OFFICES



SECTION OF GENERAL OFFICE IN TORONTO

STENOGRAPHIC work in connection with an office like that of the Canadian Manufacturers' Association is no light task, and, to handle the correspondence and other work passing through the office, quite a large staff of stenographers is required. The illustration takes in one section of the general office, with Miss Woodcock, the chief stenographer, in the foreground. About twelve capable young ladies are employed in this work in the head office, each department having one or more stenographers specially employed in its work.

THE PRAIRIE DIVISION



MR. G. E. CARPENTER, SECRETARY, WINNIPEG

IN Winnipeg are located the headquarters of the Prairie Division, taking in the provinces of Manitoba, Saskatchewan and Alberta. This office is in charge of Mr. G. E. Carpenter. Mr. Carpenter started work in 1892 as call boy with the Grand Trunk at Stratford, Ont. After experience in freight work in Stratford, Toronto, Hamilton and Winnipeg, he was appointed in 1906 traffic manager for the Winnipeg Shippers' and Jobbers' Association, which later merged with the Board of Trade. He joined the C.M.A. in 1915.

THE MARITIME DIVISION



MR. H. R. THOMPSON, SECRETARY, AMHERST, N.S.

THE work of the Association in the Maritime Provinces centres in Amherst, N.S., where the head office of the divisional secretary, Mr. H. R. Thompson, is located. Mr. Thompson's experience, prior to accepting his present position in 1916, was largely in manufacturing. He was born in Sussex, N.B., but moved to Amherst as a boy, becoming messenger at the plant of the Rhodes, Curry Co., Limited, later the Amherst works of the Canadian Car & Foundry Co., Limited. He was with these companies for 14 years, in various capacities.

THE QUEBEC DIVISION



MR. W. P. HUGHES, SECRETARY, MONTREAL

IN Montreal, the Association occupies a suite of offices in the Board of Trade Building, and these are the headquarters of the newly-formed Quebec Division and the Montreal Branch. The secretary in charge is Mr. W. P. Hughes, whose private office is herewith illustrated. Mr. Hughes was born in Arnprior, Ont., in 1888, the son of the Rev. S. J. Hughes, M.A. He attended Athens High School and McGill University, graduating in Arts in 1912. For two years he acted as assistant sporting editor of the *Montreal Daily Mail*, and in 1916-17 taught English and History in Westmount High School. He became acting secretary, Montreal Branch, C.M.A., in March, 1917, and secretary in July, 1917. Last year he took his B.C.L. degree from McGill. During his college career Mr. Hughes took a prominent part in athletics, being a member of the Intercollegiate championship football and hockey teams. Under his guidance the work of the Association in Montreal, and Quebec Province, has been progressing most satisfactorily. Standing beside Mr. Hughes is Mr. E. J. Davis, manager Montreal Branch, Graphic Arts Section.

THE PACIFIC DIVISION



MR. H. DALTON, SECRETARY, VANCOUVER

PICTURED in this illustration is the private office of Mr. Hugh Dalton, Secretary of the Pacific Division, in Vancouver, B.C. Mr. Dalton has been in charge of the Association's work in British Columbia since 1917. He received his business training with the Canadian Pacific Railway Company, having been in the employ of that corporation in different departments in Winnipeg, Calgary and Vancouver, from 1900 to 1909. Between 1909 and the time he entered the service of the C.M.A., Mr. Dalton was in charge of the transportation, stores and purchasing departments of the Western Canada Power Co., in Vancouver.

THE MONTREAL OFFICE

THE Montreal offices comprise four rooms, consisting of a committee and consulting room, board room, general office and the secretary's private office. The plant is well adapted for Association purposes, as is evidenced by the large number of group meetings which are held each month by branch members. Complete tariff files, applying between the Branch territory and all points in Canada are kept in the office for the use of Branch members. Customs rulings and memoranda and other information are collected and made constant use of. During the past twelve months the office has been particularly active in disseminating commercial intelligence. In the accompanying illustration is shown the general office, with Mr. Hughes' assistant, Miss Emma T. Gauvreau, at her typewriter. Miss Gauvreau has been in the employ of the Association since 1907, during which time the personnel of the secretaryship has changed four times. The Montreal offices of the Association are located in the Board of Trade Building, which stands in a central position in the business district of the city.



GENERAL OFFICE, MONTREAL

THE VANCOUVER OFFICE



SECTION OF GENERAL OFFICE, VANCOUVER

A VERY prominent part of the work done in the Vancouver office of the Association has been in connection with the building up of export trade through the port of Vancouver and in placing British Columbia manufacturers in touch with this business. Apart from the usual services rendered to members, it has been the special aim of this office to co-operate with all local organizations in furthering British Columbia's industrial interests, as well as those of Canada as a whole. The illustration shows a corner of the general office.

THE ASSOCIATION'S BOARD ROOMS



HEAD OFFICE BOARD ROOM, TORONTO

COMMITTEE work forms a very important part of the Association's activities, and each office contains suitable provision for the holding of committee meetings or meetings of groups of manufacturers. In this illustration is shown the large board room in the Toronto office, where many important meetings, from those of the Executive Council down, are held each month. On its walls hang a series of portraits of past presidents.



BOARD ROOM, WINNIPEG OFFICE

THE extent of the work undertaken in the Winnipeg office is indicated by this view of the Winnipeg board room. This apartment is capable of accommodating fifty people, and is available for, and is used by, members in different lines of business, for conferences. It is a commodious and well-lighted room and is decorated with portraits of officers of the Association. The Winnipeg office is located in the Northern Crown Bank Building.

THE ASSOCIATION'S BOARD ROOMS



COMMITTEE ROOM, MONTREAL OFFICE

IN this photograph there is shown the committee room in connection with the Montreal office. This room is not only utilized, when needed, for committee meetings, but serves as a consulting office when the heads of the Transportation and Tariff Departments visit Montreal to give members there the benefit of their advice and other services. It is furnished with desk and telephone for the use of members or visiting officials, besides other equipment.



BOARD ROOM, MONTREAL OFFICE

THE board room itself in the Montreal office, as illustrated in this picture, is a pleasant, well-furnished room, with adequate provision for the holding of any committee or other meetings that may be required. Branch members make good use of the equipment provided by the office as evidenced by the number of meetings that are held, scarcely a day passing without one or more gatherings taking place.

THE OTTAWA OFFICE



MR. E. BLAKE ROBERTSON



THE BOARD ROOM

IN 1918 the Association opened an office in Ottawa for the purpose of assisting members of the Association in dealings which they may have with the Government or Government departments, and also of holding a watching brief over Dominion legislation affecting, in a business way, members of the Association. Mr. G. M. Murray, formerly general secretary, was named Ottawa representative, while in January last, Mr. E. Blake Robertson was placed in charge of the office. Mr. Robertson was formerly assistant superintendent of immigration, holding that office from 1904 to 1911, and then assistant controller of Chinese Immigration from 1911 to 1919. The illustrations show Mr. Robertson's private office and the board room. The Ottawa offices are located in the Booth Building.

THE HAMILTON BRANCH



MR. H. E. WATERMAN. SECRETARY

IN Hamilton, the Association occupies an office jointly with the Hamilton Harbour Commissioners, Mr. H. E. Waterman being secretary both of the Harbour Board and of the Hamilton Branch, C.M.A. This office is located at 65½ James Street South. Mr. Waterman has always been connected with freight and transportation work, having started with the Grand Trunk Railway and later joining the Traffic Department of the International Harvester Co. of Canada, when that company located in Hamilton. In 1912, he accepted the secretaryship of the Harbour Commission, and in 1913 assumed the duties of secretary of the Hamilton Branch, C.M.A.

Canada's Industrial Expansion

A Record of Progress

INDUSTRIALLY, Canada is not marking time. From all parts of the country come intimations that manufacturing capacity is on the increase. Here a new plant is being established; there an existing factory is being enlarged. Taken in the aggregate these new developments constitute an imposing total--- a total that inspires confidence in the industrial future of the Dominion. In the following pages some of the more important developments of the day are described in greater or less detail with a series of interesting illustrations.

New Undertaking for Canada

Manufacture of Paper Mill Machinery on Large Scale to be Embarked Upon by Montreal Company

No small importance attaches to the announcement made recently that the Dominion Bridge Company, Limited, were about to enter upon the manufacture of paper mill machinery on a large scale. Orders placed with them by the Laurentide Company, Howard Smith Paper Mills and Interlake Tissue Mills for immense paper machines have determined them to extend their organization and equipment and embark seriously in this important business.

During the war the Dominion Bridge Company developed a large machinery capacity in the manufacture of munitions, marine engines and equipment. After the cessation of war work they have been endeavoring to use their equipment and organization on the higher grades of machine shop products, including steam turbines, of which they have shipped a number, and paper making machinery. Up to the present the latter line has only been regarded as an incident, but the big orders recently taken, which will occupy their present capacity for a considerable time, have led to a change of ideas which will involve pretty extensive additions to both plant and organization. However, plans for enlargement are not yet quite matured.

Acquires Huge Plant

Columbia Graphophone Company Gets Possession of Factory of Canadian Aeroplanes Limited

Engineers of the Columbia Graphaphone Company are now at work preparing plans for the re-arrangement of the big plant of Canadian Aeroplanes, Limited, on Dufferin Street, Toronto, recently acquired by them to accommodate their growing business in Canada and the export market. The plant, which was erected in 1917, consists of eight permanent buildings occupying twelve acres of ground. The exterior walls of the buildings are of steel, faced with red pressed brick. All the windows have steel sash and the buildings are protected by automatic sprinkler systems, fire signal systems, etc. The largest structure, formerly the fusilage building, is 680 feet long, with 42,570 feet of floor space. The next largest building, formerly the mill building, is 420 feet long, with 39,180 feet floor space. Between them is the wing-building, 580 feet long, with 35,200 feet floor space. At the east end of the property is a two-storey building containing 44,360 square feet of space and a storage building with 27,600 square feet. The former propeller building has an area of 18,880 square feet. In addition there is boiler house and kilns, garage, repair shop, lumber shed, time office, etc.

It is the intention of the Columbia Graphophone Co. to utilize this whole plant in the manufacture of Columbia Grafonolas and records. This will give them a greatly enlarged output and will enable them to go in on a big scale for export trade. About 2,000 hands will be employed, and the Company will make a portion at least of the cabinets for the grafonolas. The capacity in records will be increased 500 per cent., and in grafonolas 400 per cent. It is understood to be the intention of the company to form a Canadian corporation.

Start on Developments

International Paper Company Proceeds with First Unit of Its Canadian Programme

The International Paper Co. of New York have started the construction of a 50-ton sulphite pulp mill at Three Rivers. Work was begun on August 28 and as of November 1 the foundations were all in, 25 per cent. of the brick work was finished and 25 per cent. of the steel erected. The company hope to have the mill in operation by next September. As soon as the power is ready they expect to proceed with the erection of a 160-ton groundwood mill and a 200-ton paper mill, which they hope to have ready for production by September 1, 1921.

A long-term contract for power has been made by the International Paper Company with the Shawinigan Water & Power Co. At the outset some 20,000 horse-power is to be supplied, but as the plant is enlarged from time to time additional energy will be taken. After a thorough survey of the power situation, the executive of the International Co. decided that it would be more advantageous to enter into a long-term arrangement with the Shawinigan Co. than to develop their own powers.

To Make Clocks in Canada

Western Clock Company, an American Industry, is Locating a Canadian Plant in Peterboro'

An interesting newcomer among American branch plants locating in Canada is the Western Clock Company, whose home industry is located in La Salle, Ill. This company have selected Peterboro' as the scene of their Canadian operations. They have acquired the building on George Street



Where Motors and Transmissions will be made

Two up-to-the-minute plants of Canadian Products, Limited, Walkerville, now nearing completion

South up to the present owned and occupied by the Canadian Chicle Company and will secure possession about the end of the year. In the meantime they have rented space in the Barrie Building and have started operations. The Chicle Company's building into which they will move as soon as possible is 80 x 33 feet in size with three storeys and basement. It is their intention to build up their organization as rapidly as possible and within a year they hope to be giving employment to about 200 hands.

Walkerville Plants Near Completion

Two Factories of Canadian Products, Limited, Will be Put in Operation During the Winter

With the completion of the two plants being erected and equipped at Walkerville by Canadian Products, Limited, subsidiary of General Motor of Canada, Limited, there will be manufactured in Canada two component parts of automobiles not hitherto made to any extent in this country, viz. motors and transmissions. Both factories now under erection are 600 feet long by 160 feet wide, single storey, steel and concrete construction, saw-tooth design, and when completed will constitute two of the most modern automobile production plants in America. Machine tool equipment is throughout of the most advanced type and all the machines are provided with individual motor drive. In the motor plant, for example, there will be 750 motors in use. One plant will be used for the manufacture of motors; the other for transmissions and axles. Together they will represent an investment of over $5,000,000.

Canadian Woollens Expand

Three Buildings Going Up at Peterboro Which Will Increase Production by 200%

The new textile corporation, Canadian Woollens, Limited, which merged the Auburn Woollen Co. and Bonner-Worth Co., Peterboro, and the Standard Woollen Mills Co., Toronto, has already embarked on a programme of plant extension. Near the Bonner-Worth plant a building, 140 x 56 feet, three stories and basement, is under construction at a cost of approximately $50,000 to house a French spinning plant, which will spin extremely fine worsted yarn on the French or dry-spun system, a new departure for the company. Near the Auburn plant, a building, 140 x 70 feet, one story and basement, costing about $35,000, is going up to be used as a weaving shed. Accommodation will be provided for 100 additional looms. Both buildings are of brick, with stone foundation. The company are also erecting an office building, 66 x 36 feet, two stories and basement, near the Bonner-Worth plant, also of brick construction. Additional equipment, when installed, will increase production over 200 per cent. In the meantime the company report that they are unable to take care of all the business offered.

Cement Mill Expansion

Fifty per Cent. More Capacity from the Plant of the St. Mary's Cement Company

As an indication of how the cement manufacturing industry in Canada is expanding, the enlargement of the plant of the St. Mary's Cement Co., Limited, St. Mary's, Ont., is significant. This company is now about seven years old, and ever since the plant was established, enlargements have frequently been required. During the present year a third kiln has been installed and a corresponding enlargement of plant effected, which will bring the output up from 600,000 to 900,000 bbls. per day. Operations on the larger scale were commenced about November 1 and the company see sufficient business in sight to warrant the extension. The demand for cement in construction work of all sorts is now very heavy.

Its First Gas Engine Factory

Winnipeg Will Shortly Have a Plant at Work Producing Small Gas Engines

A plant is at present being equipped in Winnipeg for the manufacture of what is known as the Hafa-Hors gas engine. It is being established by the Elgin Gas Motor Company, a Manitoba incorporation, closely connected with the Elgin Gas Motor Co. of Elgin, Ill. The plant, which will be producing about fifteen engines a day by December 1, is being equipped with all the latest machinery and about $65,000 has been spent in getting it ready. It will be the first gas engine factory in Winnipeg and will give employment to about 45 hands. Mr. F. J. Grout, manager of the Twin City Separator Co., Limited, is one of the promoters of the new industry.

Bedding Plant to be Enlarged

Fifty Thousand Additional Square Feet of Floor Space for factory of the Ideal Bedding Co.

By adding two storeys to their original building, now a two-storey structure, the Ideal Bedding Co., Limited, Toronto, will increase their floor space by 50,000 square feet. The company's business has grown so rapidly in the past few years that the present equipment is entirely inadequate. As the factory is caged in on all sides by other industries and there is no more land available, it has been found necessary to

extend upwards in order to secure needed space. The building to be enlarged is 50 x 300 feet with an "L" at one end 185 feet long. The construction of the new storeys will be brick throughout with steel sash wherever possible, and the addition with its equipment will cost in the neighborhood of $150,000.

The new floor space will be utilized for the manufacture of brass bedsteads; coil, woven wire and link fabric bed springs. In the space released, a mattress plant will be laid out that will increase output by 100 per cent. From 75 to 100 additional hands will be needed to operate the increased equipment. The company believe that, when the plant is enlarged, they will have the largest bedding factory in Canada, enabling them to take care of the increasing demand for "Ideal" products and undertake the manufacture of the new process electro-welded steel bedsteads.

New Industry for Winnipeg

Parkhill Bedding Limited Are Erecting Plant for the Manufacture of Mattresses and Other Bedding

With the capacity of existing factories reported to be unequal to meet the present heavy demand for beds and beddings, a new company has been formed in Winnipeg to engage in the manufacture of mattresses and other bedding. This is Parkhill Bedding, Limited, of which J. H. Parkhill, for fourteen years president and general manager of Alaska Bedding Co., Limited, is president and manager; A. B. Jones, formerly sales representative of Alaska Bedding Co., vice-president and sales manager, and Reg. C. Young, also a former official of the Alaska Company, director and superintendent.

Parkhill Bedding, Limited, have purchased a considerable piece of property on Notre Dame Avenue West, and are now erecting the first unit of their factory. This is a brick and stone building, 60 x 125 feet, three storeys high. It is designed for the addition of two more storeys as required. Work has been progressing favorably and it is expected that manufacturing will start this month. It is the intention of the company to operate on a partial co-operative basis and all employees will be interested more or less in the distribution of profits. All employees holding responsible positions will be shareholders of the company.

It is interesting to note that Mr. Parkhill was a former chairman of the Winnipeg Branch of the C.M.A., and promises again to take an active part in the affairs of the Association.

Doubling Their Plant

Cowan Company, Limited, Are Erecting New Building Which Will About Duplicate Present Plant

Construction work was recently started by the Cowan Company, Limited, of Toronto, on the erection of a new building which will practically double the capacity of their plant. The new structure, which is going up to the north of the present buildings, will be 80 x 245 feet, of brick and concrete construction, seven storeys high at the front and six at the rear. It represents an investment of about half a million dollars. The extension of facilities was made necessary by the great demand for the company's product—cocoa and chocolate—in Canada, England and other parts of the world.

Belleville's New Industry

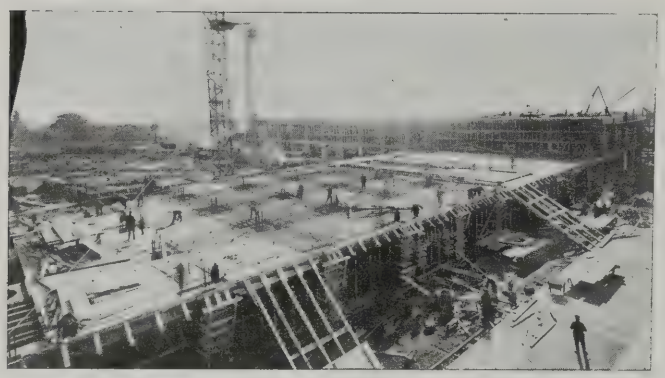
Company Formed for the Purpose of Engaging in the Manufacture of Woodworking Machinery

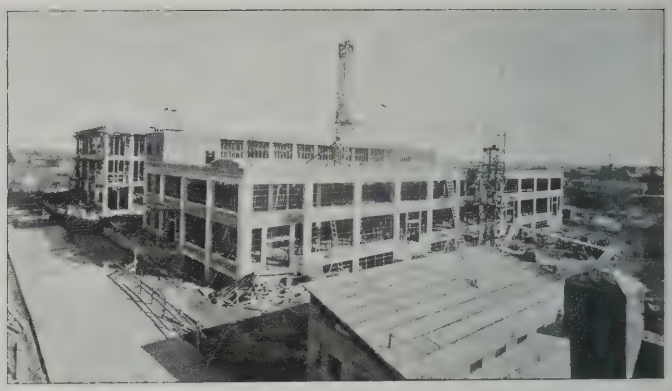
There has recently been formed in Belleville a company capitalized at $300,000 and known as the Elliott Woodworking Machinery Co., Limited, for the purpose of taking over the business and assets of the Elliott Woodworker Co., Toronto. A half-interest in the new company has been taken by Grahams, Limited, Belleville and Mr. R. J. Graham has become its president. The plant in Belleville, formerly occupied by the Burrell Rock Drill Co., which ceased operations following the death of the proprietor two years ago, has been secured and, as it was in good shape, it was possible to start



New Plant of the Cowan Co., Limited, Toronto

With the erection of the seven-storey building in the foreground the capacity of the company will be practically doubled





Extensive Developments of General Motors of Canada at Oshawa

On the left work proceeding on erection of storage and shipping building; on the right the nearly-completed enamelling shop and assembly plant for Oldsmobiles

operations immediately. The product manufactured consists of portable woodworking machinery, such as sawing, planing and boring machines, which can be operated by electric motor. The plant is L-shaped, consisting of two wings each about 100 x 50 feet. When operations reach their maximum in November, from 30 to 50 hands will be employed.

Automobile Plant Extensions

Three Large Buildings at Oshawa for General Motors of Canada Are Rapidly Being Completed

The programme of extensions which was embarked upon this summer by General Motors of Canada, Limited, will shortly be completed. This includes three buildings situated to the north-east of the present plant. The first of these is the shipping and storage building through which the whole product of the plant will be handled. It is a building 444 x 300 feet, two storeys high, of reinforced concrete, with 119,000 square feet of floor space. Attached is a train shed of structural steel work with corrugated iron roof, containing six tracks. On the first floor there will be live storage while on the second and third cars will be piled two high, giving a storage capacity of 1,000 cars. The building will be completed about December 1.

The second building is the Central Enameling Plant in which all makes of cars manufactured by General Motors of Canada will be treated. It consists of a reinforced concrete structure, 221 x 80 feet, two storeys and basement, and contains 52,800 square feet. It also will be completed about December 1.

The third building is the Oldsmobile assembling plant, where the Oldsmobile car will be put together. Hitherto this car has not been made in Canada. This building is 302 x 80 feet, three storeys and basement, reinforced concrete and will have a capacity of 5,000 cars annually. It will be in operation by about November 5.

Two More Stories Needed

Northland Knitting Company of Winnipeg Forced to Build Because Crowded for Room

Two additional stories are now being superimposed on the present three-story factory building of the Northland Knitting Company, Limited, Arlington Street, Winnipeg, in order to give the company much-needed elbow room. The original building, erected in 1912, was at the time far too large for requirements. Since then business has grown to such an extent that the turnover is now six times what it was in 1913.

The company's principal product at first was sweaters; in 1914, they started to make workmen's mitts and gloves on a larger scale and two years ago they bought out a moccasin plant and have now developed it into a thriving department. For the last two years operations have been carried on at a decided disadvantage and, in spite of high building costs, it has been found desirable to add two stories.

The addition, which is costing between $25,000 and $26,000, will be ready by about December 15, and will give 11,000 feet more floor space. The extra space will be used to extend the present plant with a view to increasing production of the three lines of goods now being manufactured. It is interesting to note that part of the space on the third floor of the building will be set apart for rest room, locker room, dining room and smoking room for the use of employees.

Make Pancake Flour in Canada

Branch of United States Industry Locates in Belleville and Starts Manufacture of Flour

A half interest has recently been taken by Grahams, Limited, Belleville, with the Ekenberg Co. of Cortland, N.Y., manufacturers of Teco Pancake Flour, in a new Canadian company to be known as the Ekenberg Co., Limited. The new industry has been located for the present in the Grahams, Limited, building in Belleville, and they have already started to manufacture two different grades of pancake flour for the Canadian market. Later on they propose to extend their operations, but details of their expansion plans are not yet available for publication.

Tissue Paper Mill Expanding

Interlake Tissue Mills Have Launched Out on Important Programme of Plant Expansion

At Merritton, Ont., the Interlake Tissue Mills have commenced the erection of additions to their plant in order to accommodate the equipment required in connection with the installation of a second tissue paper machine. The latter, which is on order with the Dominion Bridge Co., Lachine, will have a width of 148 inches, being the largest machine of its kind in use in America. With an output of from fifteen to twenty tons per day, according to the weight of the stock, the capacity of the mill will be increased to around twenty-five tons per day by the addition of the new equipment.

An extension, 125 x 100 feet in size and four storeys high, is being added to the beater room for the accommodation of five new beaters, while an extra storey is being placed on the finishing room. A new boiler house, with the latest coal unloading facilities, and a new system of railway sidings are included in the programme of betterments. It is expected that the enlarged mill will be ready for operation by next midsummer. While the management are not issuing any

figures as to the cost of the work, it will probably run in the neighborhood of half a million dollars.

At the present time Interlake Tissue Mills are about three months behind in filling orders, while domestic demands are so pressing that they are unable to take on any export business. With the new equipment they hope to be in a position not only to give improved service at home, but to secure a share of the export orders which are now very extensive.

Restored on Larger Scale

Spring Plant of Dowsley Spring & Axle Co., Limited, Rebuilt After Recent Fire

Quick work in plant restoration is recorded by the Dowsley Spring & Axle Co., Limited, Chatham. Their spring plant, a building 339 x 45, was destroyed by fire on Sept. 11. They immediately commenced reconstruction, and by Oct. 20th were producing in the new building. The latter is 339 x 75, of brick and steel with large windows, 11 ft. 6 ins. square. There is no machinery in the building, it being used as a heat-treating plant. The machinery is now in the former axle plant, a building 186 x 45, one storey. The Company have decided to go out of axle making, as the demand has decreased with the increasing use of automobiles. The estimated cost of the new spring building is $80,000.

More Shoe Capacity

Plant of Clark Bros., Limited, St. Stephen, N.B., is Being Very Considerably Enlarged

Clark Bros., Limited, St. Stephen, N.B., are building an addition to their factory to take care of added production and provide storage and office space now located in their main building. They have been making about 600 pairs of shoes a day, but with the addition hope to be able to make from 1,800 to 2,000 pairs a day. The enlargement is being financed by an issue of $250,000 preferred stock, which has been underwritten by a Boston banking house, and is meeting with a ready sale.

Tire Plant for Hamilton

Over Million Dollars Will be Invested There by Firestone Tire & Rubber Co. of Akron, Ohio

With the passing of by-laws by the Township of Barton, granting fixed assessment, etc., the Firestone Tire & Rubber Co. of Akron, Ohio, are proceeding with their plans to locate a branch plant on the bay shore just east of Hamilton. Their first unit will have a capacity of 3,000 tires a day, and will give employment to about 1,500 people. The initial investment will be all told over a million dollars.

Mr. T. Clements, Comptroller, states that it is the intention to form a Canadian corporation which will be operated entirely separate and independent from the U..S. company. "Our plans are to send a few men with experience into Canada, more as instructors, but the manning of the new company and its operation will be by Canadians."

The property acquired by the Company consists of 135 acres, of which 80 will be used for industrial purposes and the balance for housing. In preparation for equipping their plant, they have leased the buildings and some of the equipment of the Canadian Cartridge Co., which has been idle since the signing of the armistice, and are using it for the making of their machinery.

Confectionery Manufacturers Extending

A St. John Industry Carrying Out Programme Which Will About Double Its Capacity

Expansion in the confectionery manufacturing industry is indicated by the plans of the Corona Company, Limited, of St. John, N.B., who have been in business in that city for several years. At the present time an additional storey is being placed on their building, while it is proposed next spring to make an extension to the plant, the two enlargements about doubling its capacity. Most of the company's trade is in the Maritime Provinces and Western Canada, but they expect to go into other parts of Canada. When enlargements are completed they will have about 250 hands, who will be employed in the manufacture of all kinds of confectionery.

A Woollen Mill Enlargement

Plant at Lindsay of Horn Bros. Woollen Co., Limited, Being Extended for Efficiency Purposes

At Lindsay just now the Horn Bros. Woollen Co., Limited, are putting up an extension to their plant, 86 x 60 feet, two storeys and basement, of reinforced concrete. The building will be used for wool scouring, dyeing raw stock as well as piece goods and also for picking and blending. New machinery will be installed for the purpose and the work will be finished about the first of the year.

The company state that they do not expect production to be increased materially as a result of the enlargement, but the advantage will be that they will be enabled to handle





Quick work on Factory Restoration at Chatham

On the left appears the spring plant of the Dowsley Spring and Axle Co., Chatham, as it appeared after the fire on Sept. 11; on the right the restored building in process of erection. The latter was completed and in operation by Oct. 20



Plant to Make Parchment Paper

Building going up at Merritton for Canadian Vegetable Parchment Paper Co.



Big Addition Completed

Showing Plant of Imperial Cotton Co., Limited, Hamilton, as recently extended

the same amount of work with less labor and at the same time deliver the stock in better condition. The Roumanian order on which the company has been working is now practically completed. They are now operating on goods for home trade and report domestic business as very brisk.

A New Canadian Product

Company Now Completing Plant Which Will Manufacture Vegetable Parchment Paper

An interesting addition to the ranks of specialized industries is that of the Canadian Vegetable Parchment Company, Limited, who are erecting a plant between Merritton and St. Catharines for the manufacture of vegetable parchment paper. Hitherto this has not been a "Made in Canada" commodity, the supply used in this country being imported from the United States and abroad. It is the intention of the new company to supply the Canadian demand and also to do some exporting, as they expect to have some extra tonnage to offer.

The plant now under erection is 80 x 144 feet with extension 50 x 80 feet. It will contain one 80-inch parchmentizing machine, with slitters, rewinders, printing presses, etc., giving a capacity of 16,000 lbs. daily of vegetable parchment paper, both plain and printed. It is hoped to be able to start operations by the first of the year and at the outset about 50 hands will be employed. The company, which has an authorized capital of $150,000, is closely associated with the Garden City Paper Mills Co., Limited.

Will Make Springs In Oshawa

Fine Large Plant of Ontario Steel Products Co., Limited, is Nearing Completion at This Point

In close proximity to the new buildings of General Motors of Canada, Limited, in Oshawa, there is being erected a large spring factory by the Ontario Steel Products Company, Limited, of Gananoque. This plant, which will have an initial capacity of 4,000 tons of springs per annum, will be in operation about January 1, and will give employment to 150 hands. The product will be entirely motor and motor truck springs. The building at present under erection is 360 feet long by 80 feet wide, one storey high. It is of steel and concrete construction, with roof of saw-tooth construction, having "pond" monitor in the centre. The over-all height from ground to saw-tooth portion of roof is 30 feet 6 inches, with height to pond roof, 41 feet. The building is constructed with temporary wall on the east side so that it can be doubled, trebled or quadrupled in size without inconvenience, meaning eventually a building 360 feet square.

Imperial Cotton Enlargements

From 10 to 15 per cent. More Production from Extension to Plant in Hamilton

During the past season considerable enlargement has been made to the plant of the Imperial Cotton Co., Limited, Hamilton. An addition, 70 x 106 feet, three storeys and basement has been made to the main plant, and in addition a new power house, cotton storage shed, sub-station, waste house and service room have been built. Machinery throughout the plant has been entirely re-located and an increase in production of fully 10 to 15 per cent. is anticipated.

Car Wheels for the West

Dominion Wheel & Foundries, Limited, Are Establishing a New Plant in St. Boniface, Man.

Under the name of the Western Wheel & Foundries, Limited, the Dominion Wheel & Foundries, Limited, of Toronto, are erecting a plant in St. Boniface, Man., which will be devoted to the manufacture of car wheels for Western consumption. The capacity of the plant will be about 100,000 car wheels a year and it is expected that operations will commence before the end of the present year. The location of this industry in Winnipeg will tend to eliminate the heavy transportation charges imposed on wheels shipped West from the Toronto plant. While there is no immediate prospect of an increased demand for car wheels, indications are that eventually, with the construction of more cars, the demand will become stronger.

Spending a Million

Canadian Consolidated Rubber Co., Limited, Doubling Capacity of Kitchener Plant

About one million dollars has been appropriated by the Canadian Consolidated Rubber Co., Limited, for the enlargement of the Dominion Tire Factory at Kitchener, and this work is now going on. Extensions are being erected at both ends of the factory, each being 110 x 130 feet, four storeys high and giving 143,000 square feet additional floor space. This will give the factory more than double the present capacity for the production of ties.

Turn to Page 123 for Additional Industrial Expansion Information

A Unique Enterprise for British Columbia

By HUGH DALTON
Secretary, Pacific Division, C.M.A.

FIRST of its kind in the Empire, because it is composed solely of returned soldier shareholders, the Canada Western Cordage Company, at New Westminster, B.C., enters a field of operations without a single competitor established in the Province of British Columbia, the field which it aims primarily to cover.

The Company has an authorized capital of $300,000, of which $150,000 has been issued to veterans who have seen service overseas, the balance being held in the treasury. It is strictly a returned soldiers' enterprise, and no others can hold shares in the Company, and only returned veterans will be employed by it in any capacity except in positions for which special training is required and for which no veteran is available. Organized on the basis of protection to the individual, it is a "one-man one-vote" company, each shareholder having but one vote regardless of his holdings of stock, being strictly co-operative and profit-sharing.

Government endorsation of the soundness of the Company's plans has been given to the extent of a loan of $200,000 for the construction and equipment of its plant. This is under an enactment of the last session of the Provincial Legislature, by which a fund of $2,000,000 was created to assist in the establishment of new industries by returned soldiers in British Columbia; an Industrial Commissioner was appointed to administer the fund; and the strictest scrutiny has been made of the hundreds of applications for loans; the Canada Western Cordage Company being the first, and one of the few, meeting with Government approval. In addition to this the Company has been given a seven-acre site, valued at $8,000, with excellent trackage and power facilities, by the City of New Westminster.

No other industrial enterprise in Canada can claim the signal honor of having the Prince of Wales perform the first act of actual construction, when by turning the first sod on the Cordage Company's site he proved the reality of his interest in the rehabilitation of the soldiers. This pleasing ceremony, performed with the Prince's usual absence of formality, took place on September 29th, the Prince being presented with an engraved silver spade as a souvenir of the occasion by the little daughter and son of the president and vice-president respectively.

The President of the Company is Mr. E. A. Paige, who served in France with the 47th Battalion, and founded the *B.C. Veterans' Weekly*, of which he is editor-in-chief. The Vice-president is Mr. J. C. Thorn of the 7th Battalion, who was a prisoner in Germany. The directors are Mr. F. C. Brown of the 29th Battalion, and R. Pat Foster, M.C. of the 1st Canadian Pioneers. The Secretary is Mr. G. G. Hulme of the 2nd Canadian Machine Gun Brigade.

The plant will have a capacity of 10,000 pounds per day of hard fibre, using in this class of material chiefly manila hemp, sisal and New Zealand flax. The Philippine Islands are the chief source of supply of hemp, and most of the sisal comes from Yucatan.

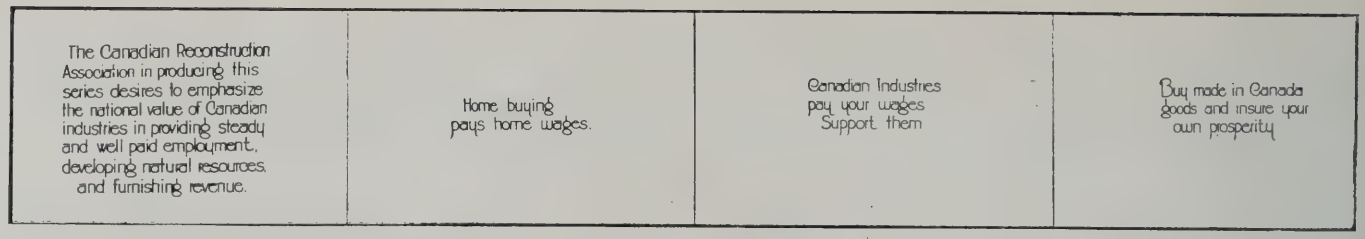


The Prince of Wales Lends his Support to a Returned Soldiers' Industrial Enterprise

On the left, the Prince chatting with the Vice-President; in the centre, the Prince receiving silver spade from little Miss Lilian Paige, daughter of the President; on the right, the Prince turning the first sod

About 65 male employees will be required. The main factory building will be 150 by 200 feet, and this will contain the most modern types of the ingenious machinery used in the manufacture of ropes and cords for general commercial purposes, consisting of preparing machinery, breakers, spreaders, draw frames, spinners and finishing machinery capable of "laying" rope from three-eighths of an inch in circumference to ten inches; the latter size being to meet the requirements of marine towing, of which so much is done on the Pacific coast. Twine and other forms of cordage products will also be manufactured.

Two administration blocks will be required; one 60 by 120 feet, for the office and warehouse for the finished products; the other 60 by 90, for tow room, tar room, boiler room and machine shop. The raw material warehouse will be 40 by 120 with a storage capacity of 480 tons. In addition to these will be the rope walk 1,326 feet in length, with reel room and bobbin room at the ends, each 40 by 60 feet.



Mottoes Appearing on the Industrial Films

Motion Pictures Promote "Made in Canada"

Instructive Series of Films Illustrating Processes in Various Canadian Industries have been Prepared by the Canadian Reconstruction Association, and are being Shown in Theatres Throughout the Dominion

By SIR JOHN WILLISON
President, Canadian Reconstruction Association

WHILE the Canadian Reconstruction Association has been conducting general campaigns for the development of domestic and foreign markets, for the retention of an adequate tariff, and for scientific investigation and utilization of natural resources, it has also been active in the stimulating of public interest in the national value of industrial development. To this end it has made extensive use of motion pictures, and it now has half a dozen films being shown in theatres throughout the Dominion. The pictures deal with various industries and illustrate not only final processes of manufacture but also stages of progress from the employment of raw materials to the finished products. The variety of the subjects is illustrated by the titles which include the iron and steel, woollen, agricultural implements, pulp and paper, sugar, and cocoa and chocoate industries. The pictures are being shown in seventy-five per cent. of the cities, towns and villages throughout the Dominion which have moving picture theatres, and it is estimated that they are seen by over three-quarters of a million people weekly.

The last census of Canadian manufacturers, in 1917, showed 34,380 manufacturing establishments in the Dominion, representing an aggregate capital investment of $2,772,517,680. These establishments gave employment to 700,000 persons, and paid over $550,000,000 annually in wages and salaries. The value of their products was in excess of $3,000,000,000, of which $1,602,820,631 represented the cost of materials used, and $1,412,686,238 the additional value given to the products by the manufacturing processes. It has been estimated that over two million Canadians are directly dependent for their livelihood upon the continued prosperity of Canadian industries, and the following titles have been inserted in the films prepared for the Association, showing the number of employees, the wages paid, value of the product, and capital invested, in specific industries:



Title of the Series

CANADIAN AGRICULTURAL IMPLEMENT INDUSTRY.

Capital invested	$80,000,000
Value of product	50,000,000
Salaries, wages, and commissions paid annually	20,000,000
Number of employees	20,000

CANADIAN IRON AND STEEL INDUSTRY, 1917.

Capital invested	$307,407,980
Value of product	400,385,086
Salaries and wages paid	78,737,983
Number of employees	77,159

CANADIAN WOOLLEN MANUFACTURING INDUSTRY, 1917.

Capital invested	$64,472,747
Value of products	78,800,202
Number of employees	25,332

CANADIAN PULP AND PAPER INDUSTRY, 1917.

Capital invested	$186,000,000
Value of product	96,340,327
Salaries and wages paid	20,500,000
Number of employees	25,000

Two additional films will shortly be issued by the Association, one dealing with the grain and milling industry and the other with the electric lamp industry. Recent figures issued by the Dominion Bureau of Statistics give the following:

CANADIAN MILLING INDUSTRY, 1917.

Capital invested	$ 72,573,982
Value of products	224,191,735
Salaries and wages paid	6,292,797
Number of employees	6,914

The character of these industrial films have made them acceptable to moving picture houses throughout the country. Being only a thousand feet in length they can be shown without any pronounced interruption in the general programmes, and they have been so well received by the public that they are in demand by film exchanges. In a letter to the Patheoscope Company, Limited, producers of the films, Mr. C. Hague, General Manager of the Canadian Universal Film Company, Limited, expresses his satisfaction that the industrial series is to start at the rate of one every week this fall, and continues:

"I was very much surprised to note the interest taken by a great number of exhibitors in this series, due to our cutting them off during the summer months. It has convinced me that they are greatly in demand at the present time. . . .

"I would thank you very kindly to advise me as far in advance as possible the list of the subjects, so that we can advise our customers the names of the subjects in advance of their showing."

MADE IN CANADA

TRADE Gillette MARK

KNOWN THE WORLD OVER



OUR MARKET

The shaded portions of the map indicate the various countries in which Gillette Safety Razors are used to-day, justifying the Gillette's famous

"The Shaving Service for Every Man ---Everywhere"

Equally true, too, the wording of our trade mark, MADE IN CANADA--- KNOWN THE WORLD OVER, for wherever men shave there is a possibility of Gillette sales, and our efforts have not gone unrewarded.

And best of all, our Export business has not been achieved at the expense of the home markets, which were never so well served as they are to-day.

Gillette

Safety Razor

MANUFACTURED AND SOLD BY

THE GILLETTE SAFETY RAZOR CO. OF CANADA LIMITED

MONTREAL CANADA

Transportation Items

New S.S. Service

Line from Vancouver to Genoa, the Levant, Black Sea Ports and Egyptian Ports Inaugurated

The Transportation Department has just received advice that the "Societee Generale de Transports Maritime a Vapeur," at Marseilles, France, will inaugurate a service from Vancouver to Marseilles, France, and Genoa, Italy, as well as issuing through bills of lading for shipments to Piraeus, Smyrna, the Levant, Black Sea ports and Egyptian ports. This service was commenced with a steamer loading on October 20th, known as the S.S. *Mont Cenis*, and other steamers will follow at monthly intervals. It is understood that the Vancouver agents of this line are the firm of Dingwall Cotts & Company.

South African Service

Steamships from Canada to South Africa Being Put on by the Elder Dempster Co.

The Transportation Department has received advice from the Elder Dempster Company, Limited, Montreal, that the steamship *New Toronto* will sail from Montreal for South African ports about November 5th, and that this sailing will be followed by another steamer about November 25th. Commencing with the December steamer a monthly service will be inaugurated from St. John, N.B., during the winter months, December to April inclusive, to ports in South Africa. It may be interesting to know that the Elder Dempster Company have been quoting for some time rates from Canadian Atlantic ports to South African ports of 50c. per ton lower than from New York.

Freight Car Shortage

Members Are Urged to do Everything Possible to Facilitate the Quick Movement of Cars

The attention of members of the Association is directed to the present serious shortage of box and coal cars in Eastern Canada and Eastern United States. It is claimed that the situation is even worse in Canada than in the United States. At the present time, or quite recently, there are 44,019 Canadian-owned box cars on roads in the United States, and 20,650 United States-owned box cars on roads in Canada. This makes the balance against the Canadian roads, 23,369.

The Canadian Railway War Board have this matter under active consideration with the U.S. Railroad Administration authorities for the purpose of securing some of the Canadian-owned cars returned to home roads. The latest reports would indicate that an improvement along this line is developing.

In the latter part of September the coal car shortage in the United States was approximately 100,000, or in other words this is the number of cars short at the mines for carrying coal. On September 1st over 12,000 coal cars of U.S. lines were located on Canadian railways.

It is well known that members of the Canadian Manufacturers Association have done everything they can in the way of prompt loading and unloading cars as well as heavier loading of all equipment. However, the car situation in the early part of this year was entirely opposite from what it is to-day. That is, there was quite a surplus then, whereas there is now quite a shortage. The above information is therefore placed before members so that they may be fully advised of the importance of carrying on the efforts which were put forth during the war. In other words, it is urged that every member load and unload every car in the quickest possible time; also that all cars be loaded to their full capacity where possible.

On October 4th the Transportation Department received a report of foreign coal cars held under load as of September 30th by certain consignees at various points throughout Eastern Canada. The commodities loaded in these cars are coal, plates, machinery, pipe, scrap, steel, lumber and tubes, and the number of days held, over free time, ranged from 2 to 28. The majority, however, seem to have been held from 4 to 5 days.

It is interesting to note, on examination of the information, that very few of the consignees were members of this Association.

Steamship Sailings from Montreal

Ships Scheduled to Sail for Various Points During Early Part of November

The following information regarding the sailing of steamships from the Port of Montreal to various trans-Atlantic ports is taken from a bulletin issued by the Canadian Pacific Railway:

To Liverpool.

Canadian Voyageur	Can. Govt. Mer. Marine, Ltd.	Ab't Nov. 5
Canadian Trooper	Can. Govt. Mer. Marine, Ltd.	Ab't Nov. 7
Minnedosa	C.P.O.S. Line	Ab't Nov. 16
Canadian Miller	Can. Govt. Mer. Marine, Ltd.	Ab't Nov. 17

* Sails from Quebec.

To London.

Corsican	C.P.O.S. Furness Line (C.P.O.S.)	Ab't Nov. 6
Venusia	Cunard Line	Ab't Nov. 13
War Peridot	C.P.O.S. Furness Line (C.P.O.S.)	Ab't Nov. 16
Canadian Navigator	Can. Govt. Mer. Marine, Ltd.	Ab't Nov. 20
Montezuma	C.P.O.S. Furness Line (C.P.O.S.)	Ab't Nov. 22

To Antwerp.

North Point	C.P.O.S. Furness Line (Furness)	Ab't Nov. 11
War Beryl	C.P.O.S. Furness Line (C.P.O.S.)	Ab't Nov. 11
Glenspean	C.P.O.S. Furness Line (Furness)	Ab't Nov. 15
Tunisian	C.P.O.S. Furness Line (C.P.O.S.)	Ab't Nov. 21

To Glasgow.

Cassandra	Anchor-Don. Line	Ab't Nov. 6
Sicilian	C.P.O.S. Line	Ab't Nov. 8
Cabotia	Anchor Donaldson Line	Ab't Nov. 18

To Avonmouth Dock (Bristol).

Vellavia	Cunard Line	Ab't Nov. 4
Sardinian	C.P.O.S. Line	Ab't Nov. 9
Cornishman	Dominion Line	Ab't Nov. 15

To Manchester.

Manchester Importer	Manchester Liners	Ab't Nov. 12
Manchester Division	Manchester Liners	Ab't Nov. 13
Manchester Marine	Manchester Liners	Ab't Nov. 16

To Hull

Norfolk Range	Furness Line	Ab't Nov. 1

To Leith.

Cairngowan	Thomson Line	Ab't Nov. 10

To Newcastle on Tyne.

Cairnmona	Thomson Line	Ab't Nov. 9

To Dublin.

Ramore Head	Head Line	Ab't Nov. 8

To Belfast.

Melmore Head	Head Line	Ab't Nov. 25

To St. Nazaire (France).

Alston	Marine Nav. Co.	Ab't Nov. 5
Cape Corso	Marine Nav. Co.	Ab't Nov. 8

To Havre (France).

Lord Dufferin	Canadian-Transatlantique Line	Ab't Nov. 1
Californie	Canadian-Transatlantique Line	Ab't Nov. 15

To Bergen, Stavanger and Christiania (Norway).

Drammesfjord	Norwegian American Line (C.P.O.S. Agents)	Ab't Nov. 15

To Buenos Aires and Monte Video.

*Canadian Settler	Can. Govt. Merchant Marine, Ltd.	Ab't Nov. 7
Clan Macbeolan	Houston Lines	Ab't Nov. 15

* Buenos Aires only.

To South Africa.

Cape Town, Port Elizabeth, East London, Durban and Delagoa Bay.

New Toronto	Elder-Dempster Line	Ab't Nov. 2
Bassa	Elder-Dempster Line	Ab't Nov. 25

To Australasian Ports.

Melbourne, Sydney, Auckland, Wellington, Timaru and Dunedin (Port Chalmers).

Whakatane	New Zealand Shipping Co.	Ab't Nov. 15

To Kingston (Jamaica) and Havana (Cuba).

Canadian Warrior	Can. Govt. Merchant Marine, Ltd.	Ab't Nov. 1
Canadian Recruit	Can. Govt. Merchant Marine, Ltd.	Ab't Nov. 22

To Barbados, Trinidad and Demerara.

Canadian Gunner	Can. Govt. Merchant Marine, Ltd.	Ab't Nov. 12

To St. Johns (Newfoundland).

A Steamer	Gulf St. Lawrence Shipping & Trading Co.	Ab't Nov. 3

Committee Recommended Tariff Board

Special Senate Committee on Machinery of Government Dealt with this Question in its Report

INDUSTRIAL CANADA deals editorially this month with the great desirability of the establishment of a Tariff Board which will make a scientific study of all tariff questions and thus helps to remove them from the field of political controversy. In this connection, the recommendations of the committee appointed by the Senate last May to report on the Machinery of Government should be given careful consideration. Sections 33-40 of the Committee's report contain the following remarks on the subject of a Tariff Board:

"33. We recommend a Tariff Board with powers to investigate (both as directed by Parliament and of their own motion), all problems connected with production, transportation and living conditions in Canada, and in those countries the production of which competes with Canada, either in home or foreign markets, in so far as tariffs are an element in these questions.

"34. It would be inadvisable in our opinion if such a Board be established to limit the scope of its powers of investigations. The effect of tariffs on the cost of production, and therefore on the well-being of the whole people, as well as on the capacity of Canadians to compete with foreigners in the markets of the Dominion, and with other nations in common markets, is far reaching and complex.

"35. It is within the knowledge of those who have followed the course of industrial development that industries have through inadequate or inaccurate information been established, languished and died, with loss of capital and dissipation of energy. It is probable on the other hand, that there are industries which might be with advantage transplanted to Canada. The Board might by its investigations and the dissemination of its findings prevent loss, and make easier new forms of production.

"36. At no time more than the present have industrial and economic conditions changed more rapidly. At no time has the avoidance of failure and of the increase of stable production been more important. We therefore think it for the advantage of Canada that this Board be established to prepare and have available information on all phases of these questions for the guidance of the Government, of Parliament, and for the information of the public.

"37. We wish with emphasis to state that it is not our intention to propose the establishment of a Board with other powers than investigation and statement of facts. To confer on any Board powers to frame a tariff would be a devolution of a function of which a Government should not debarrass itself.

"38. We believe, however, that in a matter which excites such lively passions, which threatens the unity of the people, a full statement of the facts of each phase of this complicated question, by an independent Board would be of great value. We say this without any doubt that the minister concerned has an organization which ascertains to his satisfaction conditions affecting tariff questions. These facts are not usually disclosed. It does not tend to allay unrest to take on trust his decisions, whereas the reports of this Board would be open to all and would convince the fair-minded.

"39. The composition of such a Board should represent the consumer, the producer, labor, and the expert in these matters. It should be appointed by Parliament and be permanent.

"40. We are aware that the above indications of the scope of the duties of the Tariff Board would trench on those of a Trade Board, or any other organization to increase the volume of Canadian trade.

"We are not concerned with the precise form of organizations to be established. That form must be arranged by the Government. We are confident, however, that the Tariff Board would produce good results, and we are equally confident that conditions require the wholesome stimulation of Canadian production and commerce to the highest degree."

Cellboard is the proper name for what is commonly called corrugated board

Established 1909

ADAMS CELLBOARD COMPANY

MANUFACTURERS OF FIRST QUALITY

SHIPPING CONTAINERS AND CORRUGATED PAPER

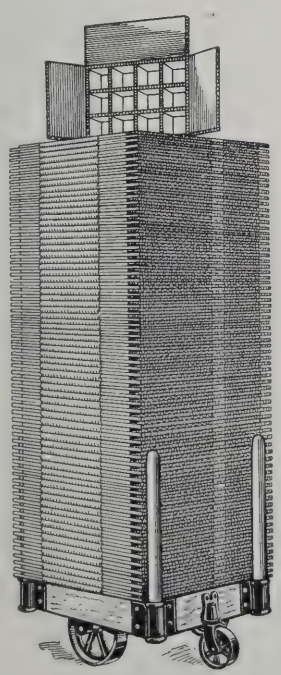
IMPORTERS OF

GUM SODA AND SEALING TAPES

Our board is the thickest on the market. Our capacity is a carload per day

We desire to have your samples or measurements to quote on when you are considering placing an order

5 TO 21 DEFRIES STREET
AND DON ESPLANADE
TORONTO



OUR SPECIALTY
FOLDING CELLBOARD
FREIGHT BOXES

We tell you how much production you are getting in the working time you are paying for

That's really what you need to know to determine your costs. Isn't it?

In and out time records at the entrance are absolutely essential, of course.

But after the man has reached his machine or bench, what then? Is his time occupied with a steady stream of work? Is it necessary to burden a foreman or superintendent with the duty of seeing that every minute possible is spent on production?

Or can this mighty useful duty be left to a machine?

It can, and here is the machine.

IT'S AN INTERNATIONAL JOB RECORDER.

It prints in plain, unchangeable figures the starting time and finishing time on any job or operation.

What Advantage is That?

1. It enables you to get the absolute cost on each and every job that goes through your shop.

2. It does the work of a foreman without using the foreman's time in seeing that the men do not waste your valuable minutes.

3. It shows the management who are the workers and who are the shirkers.

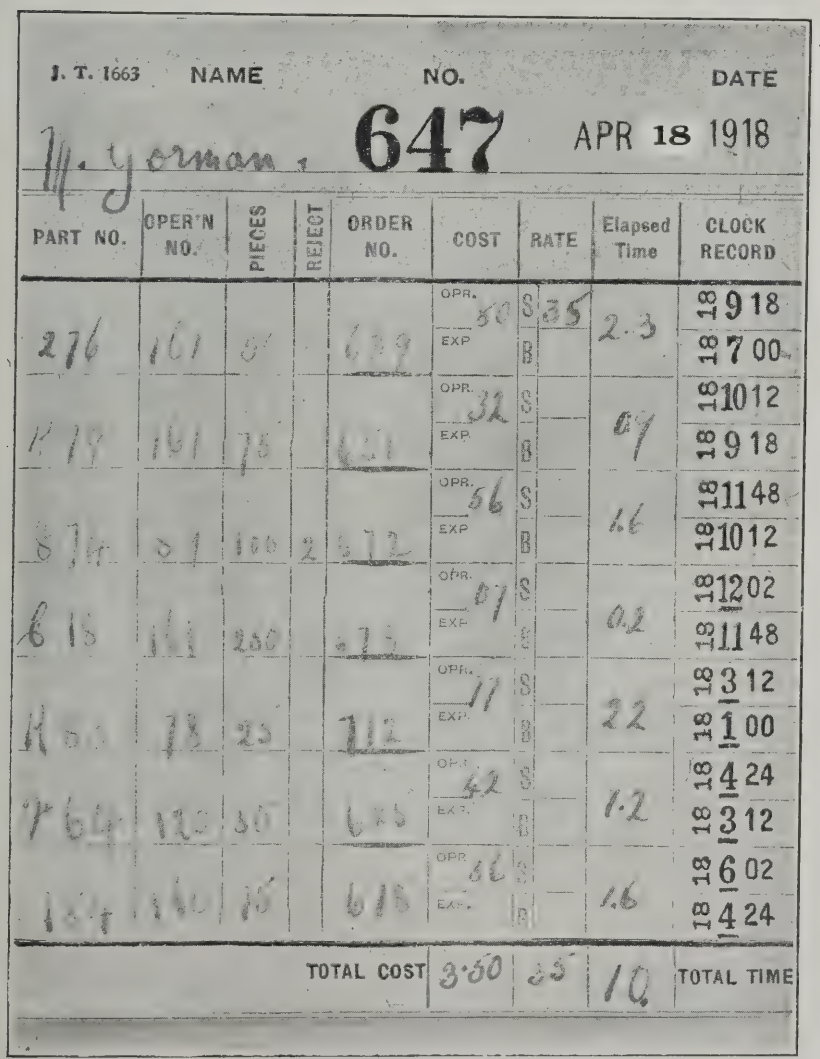


The famous International Job Recorder

4. It acts as a positive check on your pay-roll. You can check your total number of hours spent on different jobs during the day with the time registered on your In and Out Time Recorders.

5. It gives you your total cost, therefore your total profits.

A sample "Job Card" used in the International Job Recorder, Any size or shape card can be used.



For convenience in computing the time, the Recorders are made to record in hours and hundredths of hours, or hours and tenths, or hours and minutes. Prints either date or day. Can be obtained with an elimination device to eliminate the noon hour or any non-working period. Can be operated electrically if so desired. The letters S. and B. indicate the Stopping and Beginning time.

What is Profit?

It is the difference between your cost and your selling price.

Intelligent cost-keeping insures real profits.

In fact, the life-blood of business is "accurate costs."

How long can you carry on without profit?

How can you determine your profit without accurate costs?

International Job Recorders are showing the way to accurate costs for hundreds of satisfied users. Why not you?

Sound judgment is the greatest asset in business. If you look around you will find men of sound judgment are using International Time and Job Recorders. Why? Because sound judgment knows Internationals will protect payrolls and production costs.

Our pride is founded on an ever-increasing list of satisfied users. The absolute reliability of our Time and Job Recorders has made it necessary for us to increase our output many times in the last few years.

May we have an interview?

International Business Machines Co., Limited

FRANK E. MUTTON
Vice-President and General Manager

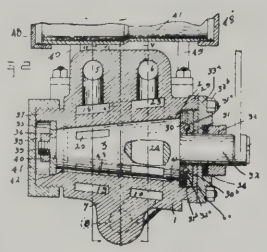
Head Office and Factory
Toronto, Canada

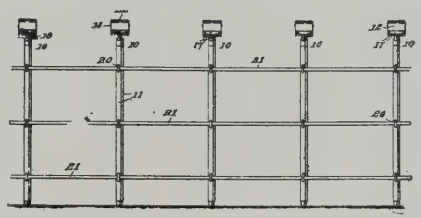
Also at Montreal and Winnipeg

(Also makers of Hollerith Electric Tabulators and Dayton Computing Scales)

PATENTS FOR SALE

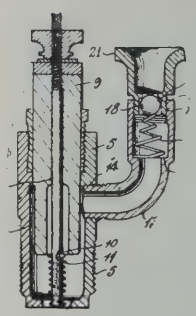
CONTROLLING VALVE MECHANISM, with means for controlling the operation of an element or a plurality of elements, such as one or more elevators, vertically movable doors on furnaces, table rolls in rolling mills and for other such purposes. The device is simple in construction, strong, durable, efficient, and convenient in use and readily set up and comparatively inexpensive to manufacture. For further particulars apply to Messrs. Slaw & Slater, Steubenville, Ohio, U.S.A., who offer patent rights for sale.

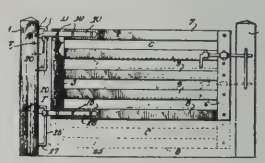




HAY DRIER, designed to provide a device which will insure the proper drying of a large quantity of hay so that when stored there will be no chance of same heating or becoming mouldy. The device is foldable and adjustable and so constructed as to have great strength. Patent rights in the Dominion are for sale by Mr. Fedor Szewczuk, Box 94, Flint, Michigan, U.S.A.

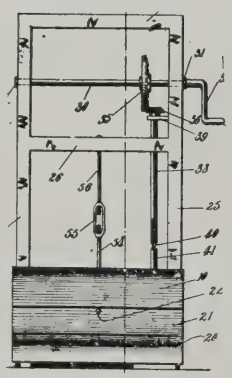
SPARK PLUG, having means for admitting air, gasoline or other fuel to the cylinder through the spark plug, means being provided whereby the air or fuel so admitted will be heated prior to its arrival in the cylinder. Patent rights in the Dominion are for sale by Mr. John O. Brook, Wilmington, North Carolina, U.S.A.

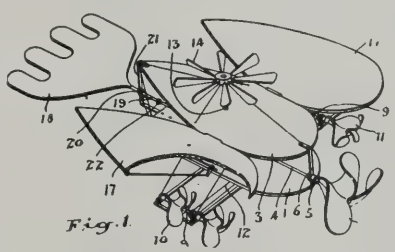




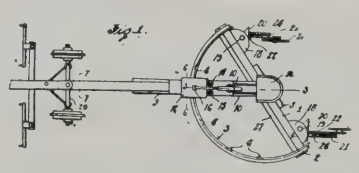
GATE HINGE, which will allow the gate to be automatically adjusted in an upright direction, and so maintain against casual displacement. It is particularly adapted for use where the ground is apt to be frozen or covered with snow, when the gate may be readily raised to swing over such or other obstruction. Patent rights in the Dominion are for sale by the inventor, Mr. Fred Wiederracht, Wapello, Iowa, U.S.A.

FLOOR CLEANER, having a rotary brush by means of which dirt and accumulations are gathered up and delivered into a compartment from which they may be readily removed. It is strong, durable and efficient in use. Mr. Fedor Szewczuk, Box 94, Flint, Michigan, U.S.A., is desirous of getting in touch with a responsible manufacturer with a view to arranging the manufacture or disposal of his interests.

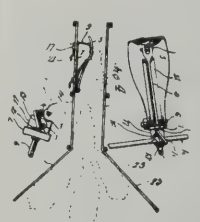




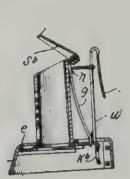
AEROPLANE, above illustration shows the Noland Aeroplane designed for safety, durability and speed, equipped with special ascending apparatus and having dependable stability and wings spread. For further particulars apply to the inventor, Mr. Geo. H. Noland, 21 Finland Street, Copper Cliff, Ontario, Canada, who offers patent rights for sale.



TERRACER, DITCHER AND GRADER.—Will build a terrace to any desired height, cut a ditch to any desired depth and will leave a flat bottom. This device has been thoroughly tested and is considered one of the best on the market. Mr. S. L. Reese, Corsicana, Texas, U.S.A., is open to negotiate for the disposal of his interests or arrange for manufacture of same in the Dominion.



LIVE STOCK COUNTER, for mechanically and automatically registering the count of live stock by the moving animals themselves. The device is simple in construction, strong, durable and guaranteed to be accurate. For further particulars apply to Messrs. Coonan, Moore & Coonan, Post Office Box 146, Poise Barracks, Idaho, U.S.A.

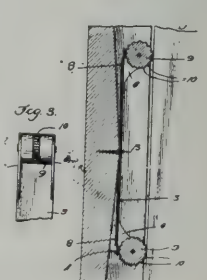


COIN CHANGER, safest, quickest, most durable and efficient coin changer on the market. Mechanically perfect, is equipped with every desirable convenient advantage of superior method for making the change. Patent rights in the Dominion are for sale by Mr. W. L. McClenahan, Lock Box 387, Council Bluffs, Iowa, U.S.A.

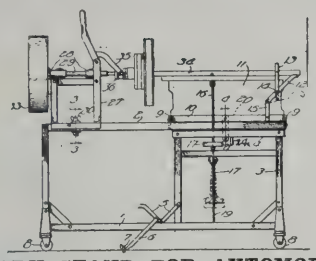


FENCE POST, adapted to be driven into the ground and provided at intervals along its length with outstanding ears under which recesses are provided, said recesses being adapted to receiving the line wires and having means for firmly holding the wires in position. Patent rights in the Dominion are for sale by Mr. Alex. Sholund, Route 1, Box 13, Marysville, Washington, U.S.A.

SASH HOLDER, which will firmly hold the sash in any desired position without requiring the use of weights or the like. The device is simple in construction, strong, durable and efficient in use and should prove an attractive proposition in view of the very extensive demands. Patent rights in the Dominion are for sale by Mr. G. J. T. Iwersen, Point Roberts, Washington, U.S.A.

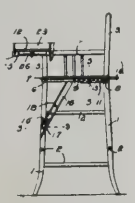


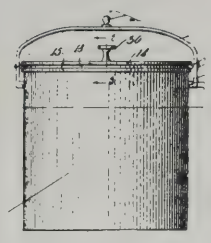
(Continued on page 81)



WORK STAND FOR AUTOMOBILE ENGINES, for repairing and overhauling, re-boring or burning-in, is exceedingly strong and may be transferred from one place to another whereby light, heat or air makes work more comfortable. Is provided with every essential, including tilting motor block bracket which is controlled with a tilting and lock lever. No bolt or nut to fasten. Requires minimum amount of time and attention. Pat. rights in the Dominion are for sale by Mr. H. P. Fries, Brayton, Nebr., U.S.A.

CHILD'S CHAIR, adjustable so as to adapt itself to accommodate children of different sizes and to hold them so that the possibility of accidentally slipping down through or their climbing out of the chair is eliminated. Patent rights in the Dominion are for sale by Mr. Phillip A. Shaver, Box 21, Route 2, Puente, California, U.S.A.



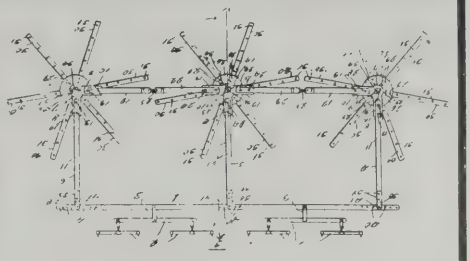


COOKING VESSEL, provided with means for securely fastening cover to the vessel and having means for collecting steam and gases that arise from the material cooked, and conducting the same outwardly at one local point where they may be received in a suitable recepticle. Pat. rights in the Dominion are for sale by Mr. Jan Crawiec, Box 169, Salem, Pa., U.S.A.

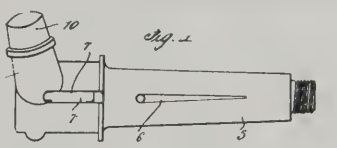
PATENTS

Trade Marks, Design Patents, Copyrights

Being near the Canadian Patent Office, we are able to personally interview examiners, thus often getting broader claims and earlier allowance of your Patent. We have access to all Patent Office Records for making searches and report, and solicit the business of Manufacturers, Engineers and others who realize the advisability of having their Patent Business given PERSONAL ATTENTION by experts at Ottawa.



ROTARY HARROW, having means for universally joining a multiple of frames each carrying a rotary harrow. Said harrow will accommodate themselves to the irregularity of the ground. The inventor, Mr. J. G. Williams, Room 17, Merit Hotel, Yakima, Washington, U.S.A., offers pat. rights in the Dominion for sale.



SPRING LUBRICATOR, having means for providing a spindle with lubricant without removing the wheel. The device is simple, durable and inexpensive to manufacture. Patent rights in the Dominion are for sale by Mr. O. H. Stair, Flatonia, Texas, U.S.A.

Manufacturers interested in patents should have their names on our Service Dept. mailing list.

HAROLD C. SHIPMAN & CO. - Ottawa, Canada

Ask for our Booklet on Patents, "Patent Protection"

Branch Office, Washington, D.C. Associates All Foreign Countries

A Premature Report

Ford Motor Co. Not Likely to Build Assembling Plant in Regina for Some time

The report that the Ford Motor Co. of Canada, Limited, was about to erect an assembling plant in Regina, proves to be somewhat premature. Mr. W. R. Campbell, secretary of the company, states that at the present time there are no definite plans for building at Regina. They are, it is true, establishing a branch there, but this is more or less a shift in sales arrangements on account of the fact that they have taken over their dealer's premises. Some property has also been acquired from the city, and the company may build on it at some future time, but certainly not before next year, as the present premises will accommodate them very nicely for some time to come.

One-Fourth More Capacity

Shoe Factory in Quebec of the John Ritchie Co., Limited, Being Extended

A new wing is being added to the factory of the John Ritchie Company, Limited, Quebec, which when completed will enable the company to manufacture 3,000 pairs of men's shoes per day or about 25 per cent. more than the present capacity. The addition is 100 feet by 40 feet, and will give increased floor space on each flat of the present building. This is the company's second addition in the course of seven years and is made necessary by the growing demand for the company's product. In 1915 they produced 8.4 per cent. of all the men's welts manufactured in Canada, whereas in 1918 their production represented 15.3 per cent.

Condensed Advertising

MECHANICAL ENGINEER WANTED

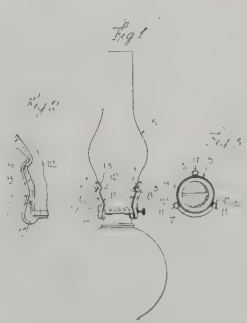
Good opening for ambitious young man, graduate in Mechanical Engineering, preferably under thirty years of age. Canada Forge Company, Welland, Ont.

WANTED

Agency of Specialties for Quebec City and District. Best connections and references. Reply to G. A. Vandry, 28 St. Joseph St., Quebec.

EUROPEAN REPRESENTATIVE

Englishman with twenty years' business experience in Canada would like to meet any manufacturer desiring resident personal representative in London to introduce his goods or develop his markets. Please address Box 4700 INDUSTRIAL CANADA.



CASH or ROYALTY

Patent No. 191,079. This invention relates to an improved Lamp Chimney and has for its primary object to provide improved means on the neck of chimney for engagement by upstanding resilient members on lamp burner whereby the chimney will be rigidly held in its applied position against accidental displacement.

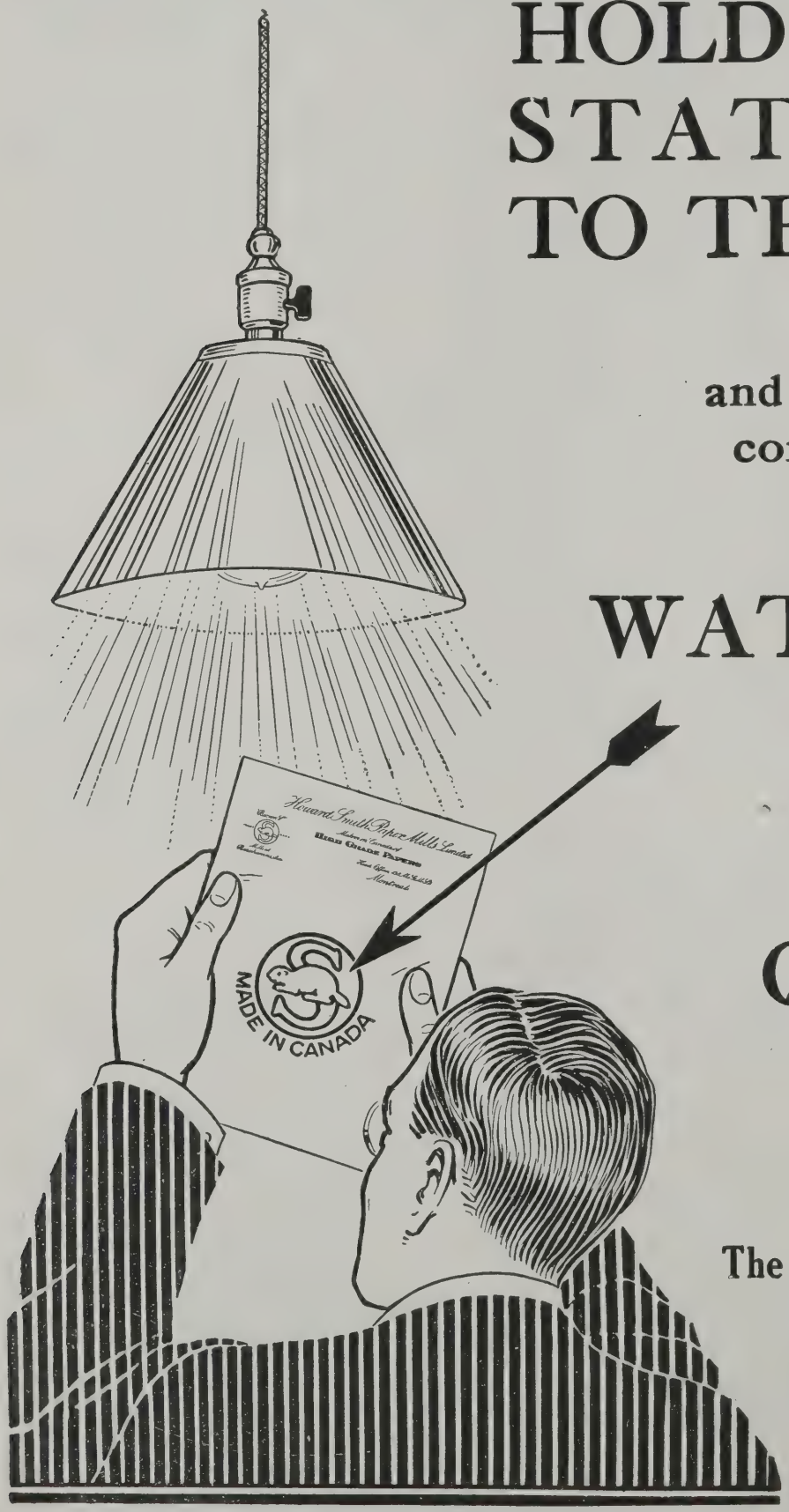
This is unquestionably one of the best inventions of its kind ever brought before the public possessing all the necessary features to make it commercially successful and being in great demand has no commercial competitor. Manufacturers and capitalists, this is the chance of a lifetime. Investigate the merits of this invention today, tomorrow may be too late.

For further particulars address: B. C. Hutto, Pelion, S.C., U.S.A.

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OFFICE AND FINANCE

Filing Systems, Good, Bad and Indifferent

How to Make Sure of the Profits that May be Lost when Letters Can't be Found

By ARTHUR VAN VLISSINGEN, Jr.

(Reprinted by special arrangement from "System")

THE papers handled in the office of one banking house in New York—its name is on the tip of everyone's tongue—are valued, on the average, at $10,000 each. The transactions are in such large figures that the loss of interest on the money tied up as a result of a paper misplaced for a day or two would often run up into three figures.

But papers are not lost in that office; there has been no instance of the sort since, three years ago, a contract well up in the millions was whisked off the desk of a partner, out the window into Wall Street by a sudden gust of sea breeze. And the blame for that, as the file chief protests with hands upraised, can certainly not be laid at the door of his department!

How Letters are Handled

How, you may ask, can this house guard itself against losses? The answer is simple: It takes as great precautions in handling all its papers as it does in safeguarding $10,000 bills. It can afford to.

When a letter comes to the mailing department, the envelop is stamped with a numbering machine, and it is registered in a book. The envelop is opened by a man of responsibility—the head of the file department. He transfers to the letter the number on the envelop, and reads it. This file department head, mind you, is not a $20 clerk; he's a real executive, who has his part in making the company plans and who knows what is going on just as much as does any member of the firm.

When he reads a letter he knows who is concerned with it. He knows, for instance, that Jameson is handling the deal, and that the letter raises a point which Jameson will have to take up with Marvin, the head of the firm, who won't be in until to-morrow morning. No matter what they decide, the letter will next require the cashier's attention. And when he has made out the cheque, the letter will be safest in the files, in case Jameson needs it again.

File Slips are Attached

So the file chief attaches a slip to the letter; this specifies that Jameson can hold the letter until noon next day, that he is then to return it to the filing department for registry, that the cashier may have it from noon to 4 o'clock, and that at 4 o'clock it is due back in the filing department once more. A copy of these facts is set down in the register, behind that letter's number. And if the letter does not return from Jameson's desk at noon, a messenger is sent to get it. Thus, no important papers are "sunk without a trace." They return to the filing department as an intermediate stop in each of their trips from one executive to another. And the time schedule assures that only a few hours, at most, will elapse between the moment that a paper is mislaid and the moment that the loss is discovered.

That company's filing department, with its complicated registries and schedules, is not for a moment to be advocated as a model for all other filing departments. Probably not more than a dozen concerns in America could use such a plan profitably!

The big fundamental lesson for business in general that that set of files points is, not the method itself, but the individuality of method that has been developed to meet a specific and peculiar need. Whoever originated that method had the mind of a master in filing. He was not afraid of the right plan, because it had never been tried.

The basic principle of all right filing is: Suit the method to the needs of the business. When files are organized accordingly they may very easily save $10,000 a year or more in a business of moderate size. For the average business, fortunately, one of the standard methods will fill the bill better than a specially designed plan.

Filing that saves the executive time and the filing department expense will, in general, avoid needless duplication of filing, of indexing, and of effort in filing and finding papers. Fundamentally the plan that is simplest and yet adequate is the best plan.

An extreme example of this was described recently in *System* by a man who has a "one man business." He found that of the letters he receives every month, not more than a dozen or so does he ever need to see again. And these fall in one or two hard-and-fast classifications. All other letters he throws in the waste basket as soon as he has answered them. And a small box file, renewed every two or three years, is ample for all his filing.

Five General Methods

There are in current use five general methods of filing: (1) alphabetical; (2) numerical; (3) subject; (4) automatic; and (5) geographic. Each of these is especially applicable to specific kinds of work; the manager's difficulty comes in selecting the method which will bring the best results.

"An interesting example of how expensive and unsatisfactory the wrong filing method may be," says an office management expert, "came to me in the very first bit of 'efficiency work' I ever did. That was a good many years ago; I was then a clerk in a Chicago department office of a big express company. My work was tracing down the complaints on service that came to our department. And I had to refer to the files almost continually. The filing clerk, it seemed, could never find anything I needed. I took to hunting up what I wanted, rather than wait. And after I had been doing that for a week or two it dawned on me that the whole filing plan was wrong.

"I put my case up to the department head so forcefully that he told me to change the files in any way that I wanted to. And when I had changed over the files—it took me only a few days to do all the work—we had no more trouble.

"The files had been organized alphabetically—perhaps the simplest method there is for most concerns. But consider our correspondence—practically all of it about delays, losses

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AGENTS IN UNITED STATES

NEW YORK—The Bank of The Manhattan Company
CHICAGO—First National Bank BUFFALO—Bank of Buffalo
DETROIT—Old Detroit National Bank
SAN FRANCISCO—Wells Fargo Nevada National Bank
and in all other principal centres

HEAD OFFICE . . TORONTO

of shipments, thefts from packages, and the like. Each letter was concerned with the shipper, the consignee, and besides our office at least one other office or department of our company. I might write three letters—one to each of these. And the letters would be filed in three different places.

"The volume of our correspondence was not great. It was easy to divide the entire correspondence into about 25 classes—delays, shortages, losses, and the like. We started, then, 25 divisions in our files—one for each subject. We made no subdivisions, but filed each letter in sequence as it came to its division of the files.

"Since we always had a pretty definite idea about the date of the correspondence we had merely to run through half a dozen letters to find what we wanted. We always knew, of course, what the correspondence was concerned with. And so we got quickly rid, at one move, of practically all our difficulties. The change was simply from alphabetical to subject filing."

A similar result came to a Minneapolis knitting mill which had been burdened by a poor set of files in the shipping department. These files contained stencils with which the shipping clerks addressed cases and boxes for customers. They were arranged in alphabetical order, behind guides. But it generally took the department's errand boy five or six minutes to find a stencil; about 10 per cent. of the stencils called for could not be found, and had to be recut.

This expense—though not inconsiderable—was far from being the biggest waste that the poor filing caused. Similarity in names might result in an order being sent, for instance, to O. B. Johnson of Walla Walla, Washington, when it was intended for Ole D. Johnson in Winona, Minnesota. The round trip freight on such a shipment is worth saving, not to mention Ole D. Johnson's good will.

Divided by States

The difficulty was overcome by a method as simple as that which worked so effectively in the express office. The stencil was divided by states, arranged alphabetically. Behind the guide for each state was placed a set of alphabetical guides.

This new division separated O. B. Johnson in Washington from Ole B. Johnson in Minnesota. And if the stencil of Ole Johnson in Winona is confused with that of Oscar Johnson in Duluth, the extra freight charge is for only a few hundred miles, instead of a few thousand.

One cause of delay in hunting out stencils, too, was the difficulty of reading them. The boy had to lift each one out of the drawer—the waxed paper was smeared with black paint—and hold it up to the light.

White sheets of stiff cardboard—high enough to extend only half-way to the top of the drawer—overcame this trouble. These sheets are scattered through the files in about the proportion of 1 sheet to 2 stencils. The searcher can now read the stencil at once, for its letters stand out clear against the white background.

The files which require the least indexing are the cheapest to operate. The two instances already cited are files of this sort—they require no indexing at all. "It is true 9 times out of 11," declares an expert on office management, "that the concern which is using an index on its files could profitably change its methods to do away with all indexing except the occasional cross reference when a letter from Barnes-Washburn Company may be asked for, or the same letter may be indicated as from George Mallson, its writer.

"A big proportion of the executives who think they need to have each letter indexed in two or three different ways could get along just as comfortably with a straight subject

file, or an alphabetical, or geographic. The occasional delays in finding a letter—there need be very few of them if the right method has been selected—are overbalanced by the saving in filing expense."

"It is remarkable," comments an office manager whose experience lends weight to his statements, "that the man who wants to economize on his filing will almost always select the material expenses—cabinets, for instance—as the place to begin. Yet if he began on the labor of filing, and did away with one file clerk out of 10, the saving in a few months would exceed the total cost of all the materials that this department uses in three or four years.

Central Files Were Lacking

"A striking example of this came to my attention last year in one of our branches. I set out to cut costs in that office. And here is what I found out about the files:

"Five of that branch's department had been keeping up their own files. There were no files that could rightly be called central.

"My first step, after finding out that no reason except tradition caused this, was to move all the outlying files into a room just off the general offices. Seven clerks had been filing in the five departments. We took two girls away from the work at once, leaving five to handle it.

"So far we had merely consolidated the files. Our next job was to reorganize the work. We transfered the files into one set of cases, alphabetically arranged. Then we assigned a section to each girl; we made her responsible for all filing and all look-ups in her section, say A. to J. She at once took a pride in keeping up her section to the best of her ability. The girls did not interfere with one another, because their 'territories' did not overlap; and we were able within 10 days to take two more girls from the department, leaving 3 to do what 7 had done before. The 3 of them are doing it easily and well.

"The next move was to rearrange the files. We placed all 1917 correspondence in cabinets along the south wall, and all 1918 correspondence along the north. The east wall is a window—the room is narrow—and the west wall mostly door.

"By January, 1919, our plan had been working a few months. It was time to transfer; so we merely carted the 1917 cabinets to the basement and put new cabinets in their place. Thus we start new files every year.

"We did not transfer the folders to transfer cases, because transfer cases are hard to work with, and we occasionally have to look up correspondence two years old. It saves time for the clerk if she has only to go through basement files exactly like what she is working wtih every day upstairs. And we saved the work of transferring the folders into cases each time.

Correspondence Kept Three Years

"We keep our correspondence three years. So in January, 1920, we shall buy another set of cabinets and cart the 1918 files to the basement. In January, 1921, though, we shall throw away our 1917 correspondence and use the cabinets to replace the 1920 files. And so from then on we shall buy cabinets only as the growth of our business demands.

"Our original saving in the file department's salary expense by consolidating and reorganizing the work amounts to over $3,000 a year. Isn't that better than saving perhaps $150 by looking first at possible savings of equipment?"

Along the lines of equipment, there seems to be a strong tendency to consider only the late designs as desirable. "Sometimes," says the head of the filing department of a large manufacturing concern, "we find it profitable to use the 'old-fashioned' box file—the file that is made up to

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"Instead of filing everything in our cabinets and then sorting it all over before we transfer, we file these permanent records—contracts and the like—in box files. There are comparatively few of them; they are seldom referred to; but when we are in need of one we need it badly.

"In transferring we are able to handle the whole contents of a cabinet into a transfer case; we save the expenses of sorting and the chance that some of our permanent records will inadvertently find their way into the transfer cases and eventually into the paper baler."

Alphabetical Filing Is General

Perhaps the instances that have been cited here of other methods supplanting alphabetical filing may tend to give the impression that alphabetical filing is generally undesirable. On the contrary, it is the method most widely in use, and on the whole the most desirable. With adequate guides, the method enables the clerk to go straight to the desired correspondence, without recourse to indexes. Its simplicity is the quality that recommends it.

A variation sometimes used consists of giving a number to each section of the alphabet which has a guide. Thus Aa-Af may be number 1; Ag-Am, number 2; and so on. When a paper is filed in subdivision 2 it is marked 2. Then, if by chance it is misplaced in another division, the file clerk is sure to notice its number and replace it where it belongs.

The numerical method involves giving each paper—or folder—a number as it is put in the files. A card index is necessary; the chief advantages of the plan are its accuracy and its flexibility. As many cards as are desired may be used for each letter. The cards may carry the name, subject, and geographical location, and one of them be filed under each heading.

The automatic method is essentially the alphabetical method, with a numerical check. Letters are filed: first by name; and second by initial. Thus R. T. Adams is filed behind the guide Aa-Am, and behind the secondary guide R. A. R. Allen is filed behind the same primary guide, but behind secondary guide A. Each primary and secondary division has a number, shown on guide, on folder, and on a chart. Thus R. T. Adams goes in class 1-27; A. R. Allen, in 1-1.

The geographic plan provides, usually, guides for states, folders perhaps for cities arranged alphabetically within each state, and straight alphabetical arrangement of correspondents' names within each city. It is relatively expensive of operation, but gives remarkably satisfactory results to concerns whose work indicates the need for such files.

Subject filing is also widely used. Each subject has a folder, a guide, or a cabinet, according to its size. It needs indexing, usually. And it can be indexed alphabetically, geographically, or by a number of other methods.

Which plan best suits an individual business can be decided only by someone who is intimately familiar with that business. And the right decision is based on its specific needs, and on common sense.

Royal Bank Extends Its Sphere

Opening Several Branches in Cities of the South American Republics this Fall

Several interesting announcements have been made recently relative to the opening of branches by the Royal Bank of Canada in South America. The bank has opened in Rio de Janeiro, Brazil; Port-au-Prince, Haiti, and is arranging to

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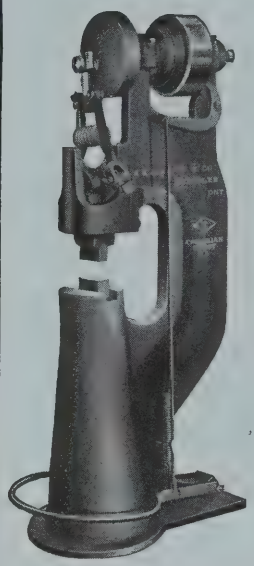
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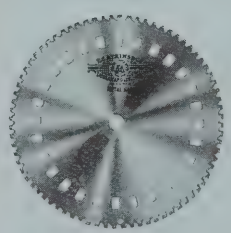


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Milling Profits Less

Canadian Flour Milling Companies Earned Slightly Less in the Last Fiscal Year

During the past month several of the big milling companies issued their annual reports. While earnings continue on a large scale, the totals reported fall somewhat behind those of the previous year. Thus the Ogilvie Flour Mills Co., Limited, showed profits from flour milling for the year ended August 31, 1919, of $649,777, compared with $832,910 for 1917-18. From other sources income amounted to $982,738 against $1,122,504 or a total income of $1,632,516 for 1918-19, compared with $1,955,414 in 1917-18. The past year's showing, while not up to the previous year, was yet better than the display of 1914-15, which had been the banner year up to that time.

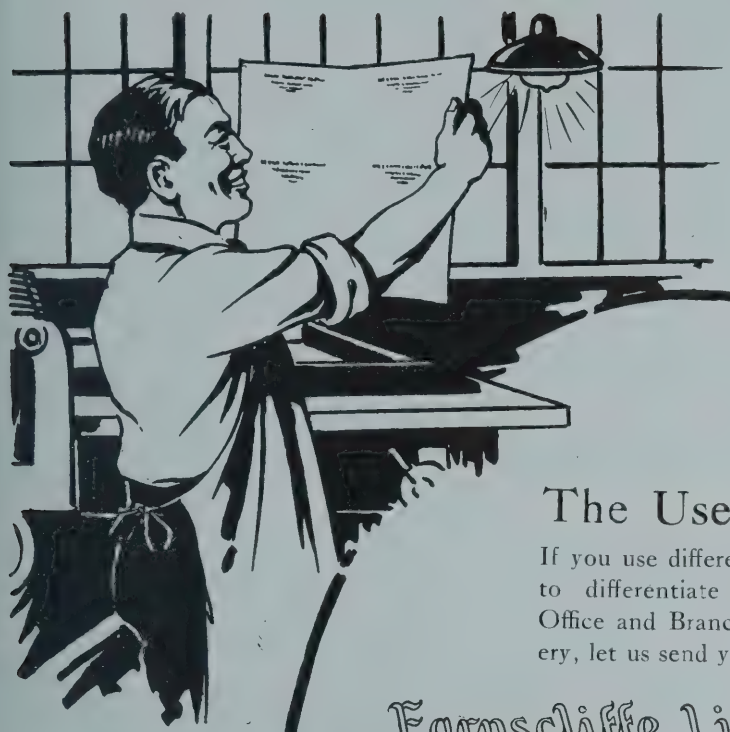
The Lake of the Woods Milling Company, Limited, for the same period enjoyed profits of $756,616, which represented a decrease of $101,298 over 1917-18. Milling profits amounted to $547,152, a falling-off of $54,368. Here again, while the showing was less favorable, compared with the previous year, it stood well in comparison with earlier years.

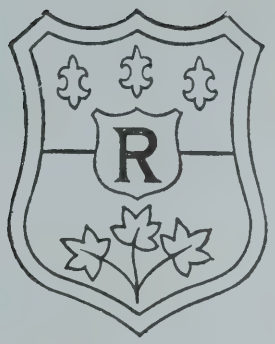
The St. Lawrence Flour Mills Co., Limited, reporting for the year ended August 31, 1919, had earnings of $245,594, which compared with $268,737 in 1917-18, but with only $171,071 in 1916-17.

The Western Canada Flour Mills Co. reported net income after making provision for depreciation, etc., of $437,986, which compares with $543,845 a year ago, and $418,022 in 1916-17. The president of this company, Mr. A. Kelly, attributes the decline in profits very largely to the effect of labor troubles, which necessitated the shutting-down of some of the mills.

Presenting the annual statement of the company to the shareholders of the Lake of the Woods Milling Co., Limited, Brig.-Gen. F. S. Meighen, the president, said: "Last year was an excellent one for the company, as both domestic and export business were good. From present indications, the export side will not be as good this year, and we shall have to depend largely upon our domestic trade. This is excellent at present, and we are taking every possible means to develop and extend it. I feel optimistic, however, as I believe that there will be a general increase in activity in the work of reconstruction and production. I expect, therefore, that every month will see a gradual return to more normal conditions of trade. I think there is no reason to fear for the future prospect of your company."

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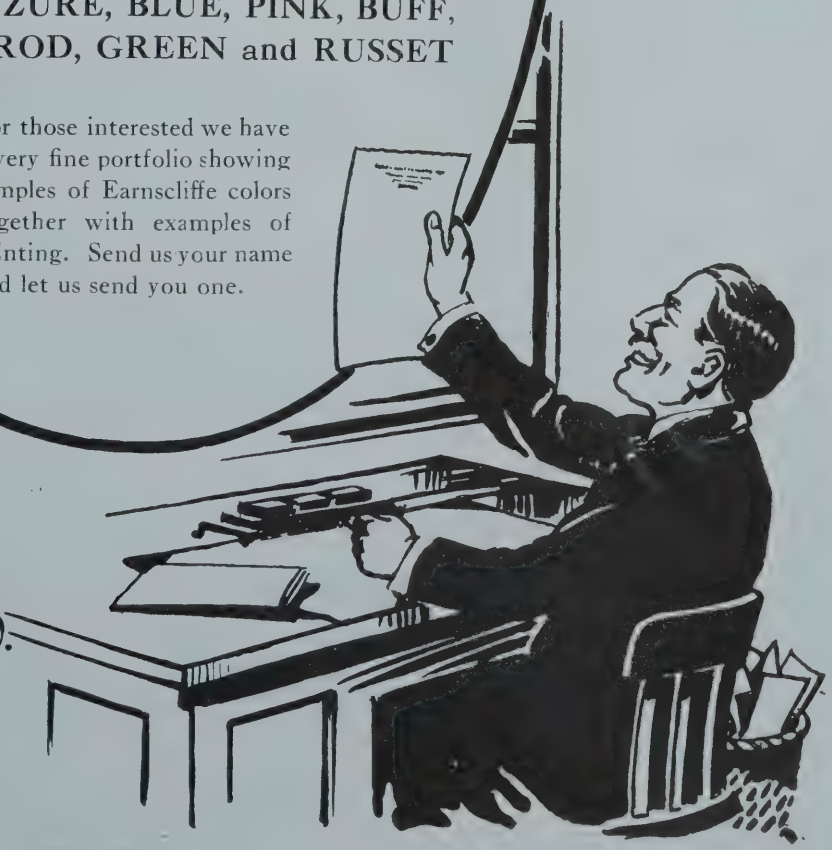
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READABLE EXTRACTS
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The Factory Visitor's Welcome

There are certain objections to allowing too free access to plants on the part of visitors; but generally speaking the manufacturer who hangs up the "Keep Out" sign and locks the door on the secrets of his manufacturing processes and methods loses in the end more than he gains from so doing

By LEON I. THOMAS
(From "Factory")

"WE were on our way home, the foundry foreman and I, from an inspection trip, during which we had visited a foundry in a neighboring city with a request to be shown through," a Canadian executive recently told me. Then he went on, "The superintendent of the foundry visited had, after reading our letter of introduction, and after some very apparent hesitation, said that they didn't make a practice of that sort of thing, but he 'guessed it would be all right.' He had then started us off as if he were training us for a cross-country walk and we were in at one end of his foundry and out at the other in very short order.

"The foundry foreman was sore and when we had settled ourselves comfortably on the train for the return trip, he proceeded to relieve his mind as follows:

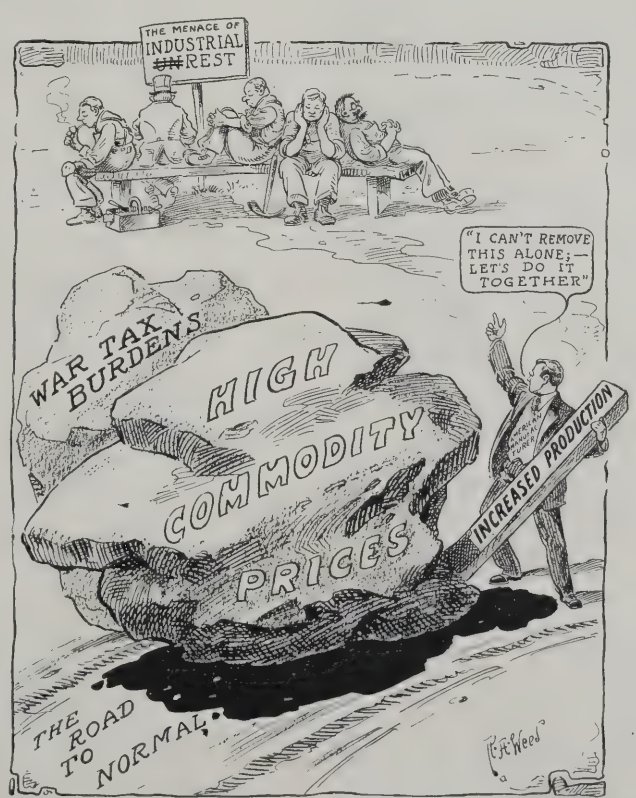
"'Well, we didn't get much out of that fellow did we? He is a good example of the old-time foundryman who, fortunately for the foundry business, are getting scarcer all the time. He was afraid that we would carry something good away with us, wasn't he? No doubt we would have if he had been broad-minded enough to stop and talk things over with us a little bit as we went along. It's a sure thing though, that he could have gotten as much out of the discussion as we did and maybe a little more. Why there were several things which I noticed as we passed them on the fly that I know I am doing in a better and cheaper way than he is, and I would have been only too glad to tell him about them if he had given me half a chance.'"

Inter-factory visits by foremen and department heads have become so frequent in these days, and particularly since the value of co-operative effort taught during the war, that keep-out signs prompted by a keep-out policy are rapidly passing. An industrial engineer of one of the large tire companies outside of the Akron district said to me recently, "We in the rubber business used to have the name of being extremely secretive, and we were too. But now that is all changed. We are in close touch with all the rubber people in the Akron district. We develop a method that saves us say 15 cents on each tire. We soon go down to Akron and tell some of the people there about it. Perhaps we let them use it for a royalty of say five cents and it is more than likely that we come back with some other practical idea under a similar arrangement. We both profit."

As a general rule, the man who hangs up the "Keep Out" sign and locks the doors on the secrets of his manufacturing processes and methods against competitors and all comers generally, loses in the end more than he gains from so doing.

There are, of course, exceptions to the rule and the question is debatable, and there is argument available enough on both sides to draw it out into as long and tedious a discussion as a time-killing political debate. Also there is a distinction which can be made between hanging up a general "Keep Out" sign on the factory, and locking the door against competitors and others who come to inquire about methods and to swap ideas.

There is, for example the excuse for the no-visitors rule that it is a check against the promiscuous and idle invasion of passersby and loafers. The free and indiscriminate coming of visitors and onlookers to any manufacturing institution brings with it both danger and interruption. The idlers standing by may get in the way and get hurt now and then, and through getting in the way and through detracting the attention of machine operators may be responsible for many accidents, and cer-



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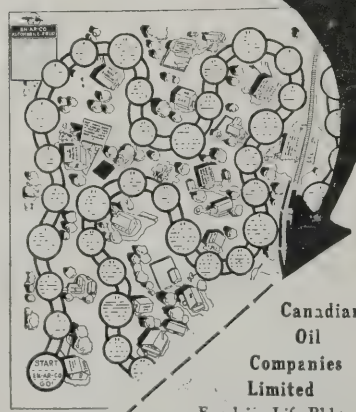
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Send me your En-ar-co Auto Game Free. Enclosed find three-cent stamp to partially cover postage and packing. Also give nearest shipping point and quote prices on the items I have marked.

I use..... gals. Gasoline per year
I use..... gals. Motor Oil per year
I use..... gals. Kerosene per year
I use..... gals. Tractor Oil per year
I use..... lbs. Motor Grease per year
I use ..... lbs. Axle Grease per year
My Name is .....
Address .....
Post Office ..... Prov.....
I own .....
(Make of Automobile or Tractor)

Be sure to give make of auto or tractor or game will not be sent.

Automobile am at present using..... Motor Oil. I will be in the market for more oil again about ..... and you may quote me on ..... gallons En-ar-co National Motor Oil.

tainly they divert the attention of the men at work more or less.

There may be now and then certain manufacturing secrets that it is essential to protect with the locked door, certain things that are not patentable or cannot be protected enough by patents to make the manufacturer of them secure. Yet these are but exceptions that prove the rule, for as a general thing a man gains more than he loses by the open-door policy. This is because he shows his competitor that he invites the confidence of the competitor and through it develops a fair exchange of ideas, which begets much better progress than is ever possible with each man going it alone and thinking out and wrestling with his various problems unaided by this exchange of experience and ideas.

In speaking of the interference of visitors with workmen there should be set down, however, a management advantage. It is entirely possible that the pride in an employee's work is stimulated. In fact, it has been a practice of the National Cash Register Company to put a notice on the shop bulletin boards headed "Visitors Expected To-day" and under this caption the list, which may include prominent outsiders or perhaps branch managers or other executives.

Then of course there's the advertising value of showing visitors about the plant, particularly if the product has a general distribution under a trade-marked name. No one would think of putting up a "No Visitors" sign on the plant of a nationally advertised food product. It would be suicidal. A sign reading "Our plant is not up to sanitary standards" could hardly be worse.

Treat Visitors Like Buyers

Why hasn't this same argument some force, if not to the same degree, in any factory? One leather-belting manufacturer apparently holds something of this view for he advertises: "The leather-belting business is full of secrets and the manufacturers can't give them away, you know. Nobody can get in. He might see a workmen sew up or glue a lap. But —with us it's different. Anybody can see what we do and everybody is cordially invited to go through our works." Then he goes on to suggest that you ask the other fellow how many "presses he has." He then uses phrases, "large plant, big volume," with the implied challenge, "come and see for yourself what's behind our product."

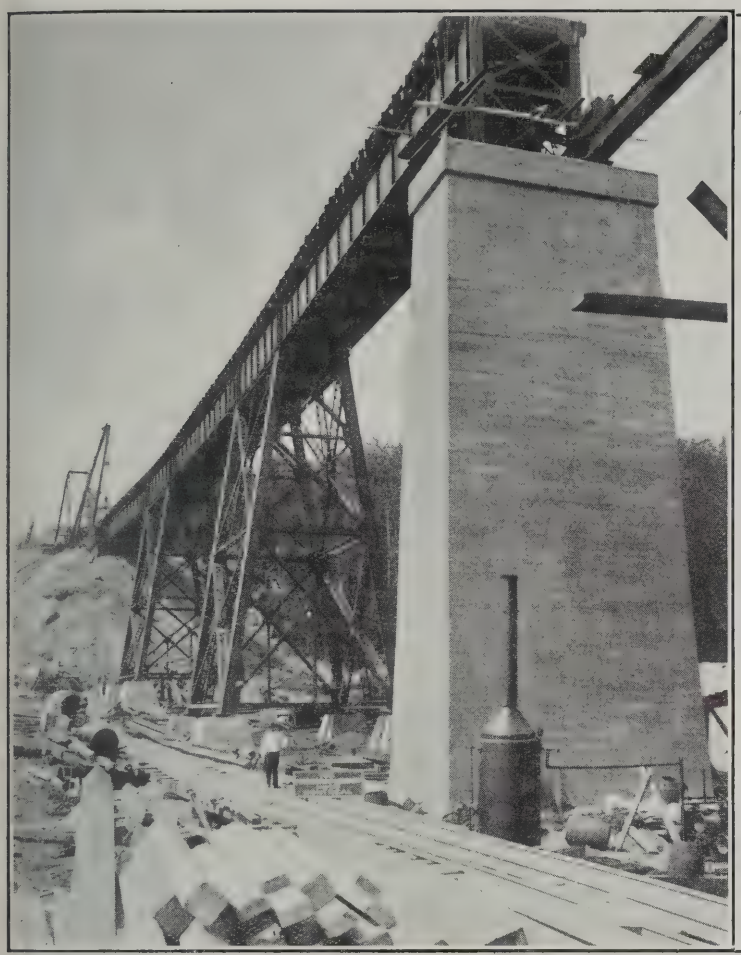
This is not mentioned as a suggestion to advertising copy writers but to emphasize one phase of the value of welcoming visitors to a factory.

Just by coincidence it was a belting manufacturer that expressed the following similar views on courtesy to visitors that builds good will. "There is still among us the business man who says he is too busy to see every Jack and Jill that comes along and that he hasn't time to run a 'rubber-neck' wagon around his plant.

"And really, it is a simple matter to make every visitor feel at home by showing him that his visit is a real compliment.

"Above all, let his first reception be pleasant. And don't keep him waiting—the seat in the ante-room grows hard after much sitting, while temper tugs at the leash. Just send out word when you will see him. If you are too busy, delegate a subordinate to pilot him around.

"In other words treat every visitor as if he were a buyer. He may be if good will counts for aught. And those who have taken pains to cultivate the good will of visitors have ample reason for continuing the practice."



THIS PIER was built through a greater depth of water than any other pier ever sunk in America—with one exception.

It is 102.3 feet below water level.

Such work requires unusual skill, resourcefulness and equipment—all characteristics of

THE FOUNDATION COMPANY LIMITED

ENGINEERS CONTRACTORS

MONTREAL SYDNEY

HON. FINLAY G. MACDIARMID,
Minister of Public Works

W. A. RIDDELL, M.A., Ph.D.,
Superintendent

TRADES AND LABOUR BRANCH DEPARTMENT OF PUBLIC WORKS

THE TRADES AND LABOUR BRANCH administers the following:

The Trades and Labour Branch Act
The Bureau of Labour Act
The Stationary and Hoisting Engineers Act
The Building Trades Protection Act
The Factory, Shop and Office Building Act
The Steam Boiler Act
Employment Bureaus
Investigation and Research

Employment offices are in operation in 35 cities and towns of the Province, and are the Ontario units of the recently organized "Employment Service of Canada."

Are you getting your help through the medium of the employment service, which you as a taxpayer are helping to support?

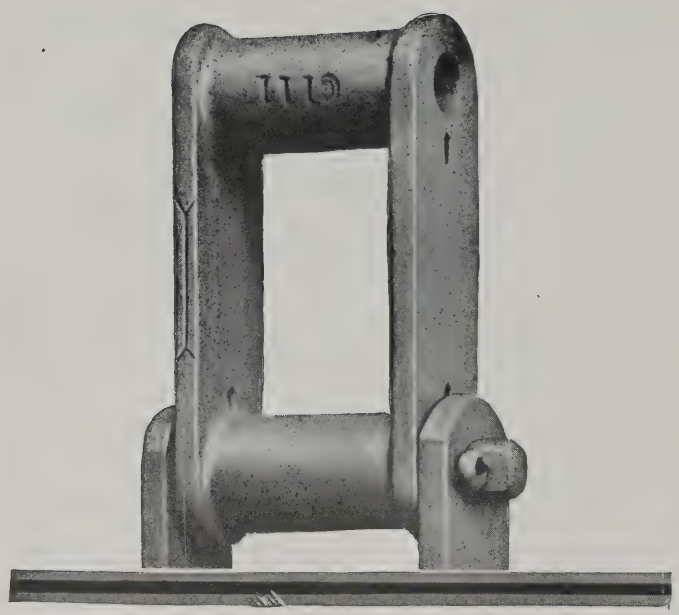
The value of these bureaus will increase in proportion to the extent to which they are used by employers.

NOTICE TO STEAM USERS:

At the last Session of the Legislature, the Act respecting Stationary and Hoisting Engineers was amended, said amendment requires that on and after January the 1st, 1920, all stationary steam plants in the Province of Ontario must be registered with the Board of Stationary and Hoisting Engineers. Application forms for this purpose will be forwarded on request. The boiler horse-power and other information contained in these application forms is to be used for statistical purposes.

A Registration Certificate will be issued to each applicant.

W. C. McGHIE,
Chairman of Board
15 Queen's Park, Toronto



"COMBINATION"

LINK-BELT

FOR ELEVATING AND CONVEYING

STRENGTH and low cost are combined in "C" Class Link-Belt. It is well-established in the fertilizer industry as a durable Link-Belt for elevating and conveying

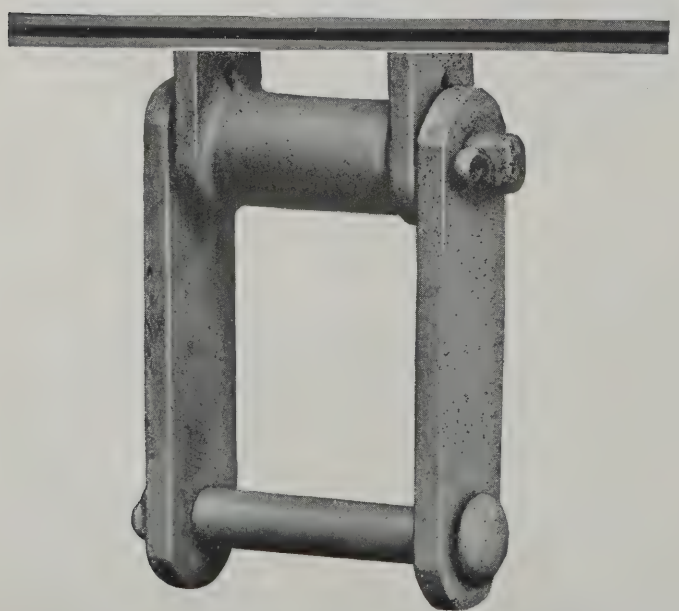
Length of life in service is increased by preventing motion between the pin and the side bars which hold it. The pins are accurately fitted to the side bars. A flat portion is milled accurately at the end of the pin, fitting into a carefully broached hole in the side bar. Obviously this construction is superior to forged lugs or necks under the head to hold the pin in place

Write for Folder No. 306, which gives particulars regarding "C" Class Link-Belt. Our experienced engineers offer their services in solving your problems in elevating, conveying and power transmission. Write to the nearest office.

CANADIAN LINK-BELT CO., LTD.

Wellington and Peter Streets
TORONTO

Stock also carried at 1195 St. James Street, MONTREAL, Que.



BRINGING UP RECOMMENDATIONS

This writer is strongly of the opinion that, when recommendations are introduced at a conference, they should be presented in written form. Such proposals demand more attention than verbal ones and can be studied more carefully by those who will have to reach a decision about them. It also tends to accuracy.

By John R. Mason.
(From "Industrial Management.")

Very often the success of a recommendation depends upon the method the originator uses in presenting his idea and plans to the higher executives of his concern. This is especially true when dealing with personnel problems. Manufacturers as a whole no not think in terms of personnel, and cannot conceive that their employees can be secured by any method similar in its particular field, to the specifications they use for their raw material; nor that they can be handled by scientific laws or procedure, equally as vital as the methods by which raw materials are converted into the manufactured product.

A first step in any effort to better personnel should be a careful study of present conditions. This is absolutely essential, and it is also helpful to secure so much information as possible concerning the problem either by reading or visits to other plants. Except when it is necessary, in gathering information concerning a problem in mind, no mention should be made of it, nor of any plans or recommendations until the entire proposal is worked out. After condensing the proposal and arguments so far as possible, have them written out and a carbon copy given to each of the men with whom it is to be discussed at a conference. This is where the employment manager should remember to study the men with whom he is to deal, at the same time that he is working out his recommendations.

Cite as Many Examples as Possible

Following are the points to be included in a report of this nature: First, as analysis of present conditions and their resultant faults; second, a statement of what would be an ideal system; third, the proposed system with a statement of its weak as well as its good points. Believing that a start in the right direction is better than no improvement at all, the proposed system is not always the ideal one, but very often it may be the only possible solution, considering plant facilities and organization. In this report cite as many examples as possible of what other concerns are doing, especially those in the same line of business, to meet and remedy the problem that is to be discussed.

A written recommendation has the following advantages. It demands more attention than a verbal one and as each man receives a copy of it, there is less likelihood that it can be forgotten or side tracked by any one man. It also forces the person making the recommendations to be absolutely sure of his statements and less liable to exaggerate. It is not human nature for a person to be so optimistic in "black and white" as verbally. Because of a written recommendation a person is better able to command at the conference, on having thoroughly studied the problem, it is easy to anticipate many of the objections as well as questions that will be asked and draw up conclusive rebuttals in advance.

In the conference itself, merely give a short verbal statement of the conditions and recommendations, as every one present should have read his copy of the recommendations. Then let the others take the lead in the discussion. Get the work and arguments into the written paper. Except for answering questions or correcting wrong impressions, do not attempt to take part in any discussions but merely direct them on to ground where one is perfectly familiar.

By Product Coke

Hamilton Pig Iron

Open Hearth Steel Billets

Steel and Iron Bars

Open Hearth Steel Sheets

Quality

Drop Forgings

THE

STEEL COMPANY

OF

CANADA

LIMITED

HAMILTON MONTREAL

Service

Railway Fastenings

Wrought Pipe

Pole Line Hardware

Screws & Nails

Bolts Nuts & Washers

Wire & Wire Products

WHEN 3 PER CENT. IS IN CONTROL

There should be some channel, through the development of industrial democracy, by means of which employers can bring about a better understanding with the great mass of their employees. It is said that just three per cent. of the employees of any concern are in a position to impose their will on the majority.

By George E. Holmes.
(From "Industrial Management.")

Estimates of the actual number of dissatisfied employees wishing to strike during any labor disturbance have been inside of the figure of three per cent., showing conclusively that this small minority has always been able to impose its will upon the greater majority.

This being the case, we ask ourselves why it is that the worker can rarely explain just why he is "out" except that he "followed the rest." Are these men like sheep that they follow the first leader that presents himself? And, are they so completely devoid of individual reasoning powers that they are incapable of thinking for themselves? or are they so cowardly they dare not oppose?

This would be a most pessimistic view of our laboring class and one unworthy of them. They have fought and died for a principle many times—a principle involving the good of the whole rather than one of personal interests. Is it not possible that in this very thought, of a principle, exists the solution of the entire "labor problem?"

Primarily, our first consideration should be with the laborers' viewpoint—just what does he think? We know that he believes his employer is his enemy, that he is selfish and entirely inconsiderate of others, that he looks upon his help as so many lifeless machines created for his especial benefit. He has this preached at him from every angle.

Few attempts have been made by his employer to refute this—he being devoid of any channel through which he could unbiasedly present his side of the question without it being taken as subterfuge, and the idea of "slipping something over on the workingman."

The three per cent. have dominated because they had something definite to offer the workers. Whether this was based on facts or not mattered little, it was a *something* and always help promise of betterment. They appealed to the emotional side of the worker and gave him to understand they were fighting for the principle of right and equality.

We have always believed that right will prevail. Is it not possible for the employer to make use of the lesson the three per cent. has taught him, and by creating a channel for complete understanding appeal to the great majority—the 97 per cent. showing them conclusively that their best interests are not embodied in a spirit of antagonistic competition but in closer coöperation?

If properly handled, industrial democracy puts into the hands of the 97 per cent. the truth of the entire situation, first. It educates them to an understanding of why they are not entitled to examine the books of the company. It shows them that the company has taken the risks, has supplied the capital, has created the organization and made possible the sale of the product. They understand and believe that the profits of the concern belong to the fellow who earned them. They come to realize that their additional earnings, beyond that established as a mean basis, must come from their own individual interest in assisting the management to reduce overhead costs, labor turnover, production costs, departmental losses, and in bringing forward ideas for general betterment; that any recommendation they wish to make will be accepted in the true spirit of a constructive suggestion and not in the light of a demand.

The Canadian Appraisal Company
Limited

DURING the past fourteen years we have appraised some four thousand properties, scattered all over the Dominion of Canada.

These include the leading and most representative plants of every manufacturing industry of the Dominion.

The valuations which we make comprise land, buildings, plant, machinery and equipment, tools, water powers, etc.; in fact, all the permanent working plant of any manufacturing or other industry.

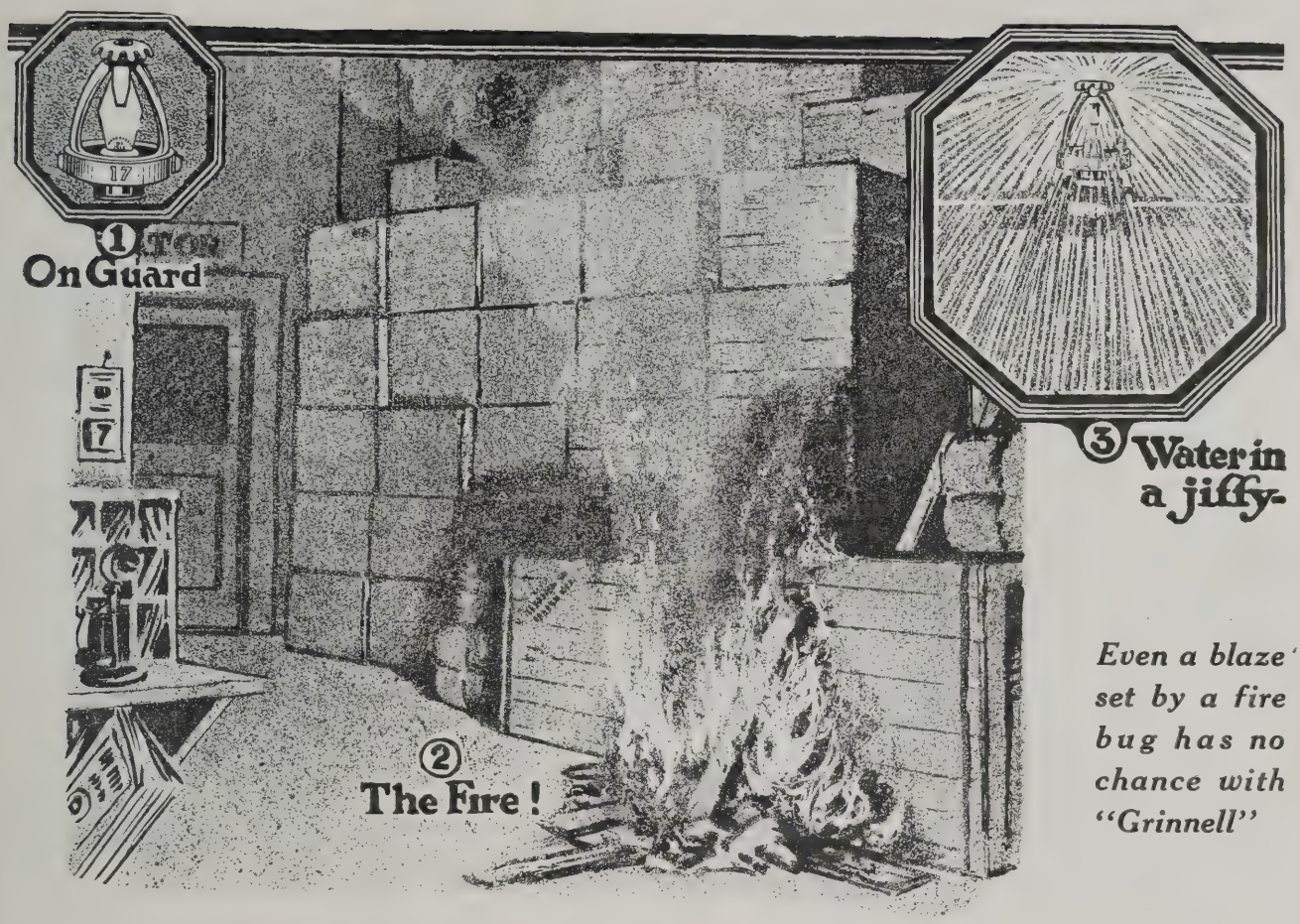
Our certificate, therefore, of values, in conjunction with the certificate of profits and liquid assets prepared by the accountant, furnishes a complete verification of a company's assets.

Correspondence Invited

Head Office: 17 St. John Street, Montreal

TORONTO
Royal Bank Building

NEW YORK
Equitable Building



Even a blaze set by a fire bug has no chance with "Grinnell"

Make a Date with the Fire!

IF you knew that a fire was soon to come that would disrupt and destroy your prospering business, you would make an ***appointment*** with that fire if you could.

You would ask to know the particular spot and the exact minute. You would be there on the dot.

You'd even have a dozen buckets of water handy to give your guest a cold reception.

You wouldn't be five or ten minutes late.

A Grinnell Automatic Sprinkler System, figuratively speaking, has an appointment with ***your fire.*** It is there at the exact spot, at the particular minute. It greets that fire with many buckets of water and, try as it will, the fire cannot disrupt or destroy your business.

Before the fire could be detected by the most careful watchman, "Click!"---the sprinkler head deluges the space below it with a resistless rain that smothers every trace of fire.

Your insurance man will tell you that the installation of a Grinnell system means that in a few years the saving in insurance premiums pays its entire cost and thereafter continues to pay big dividends as long as you are in business.

Important

Heretofore the underwriters have often required a tank supply for automatic sprinklers in addition to the city mains. Now, however, Grinnell Sprinkler equipments can often be installed without a tank.

Get the facts *For full information write*

CANADIAN GENERAL FIRE EXTINGUISHER CO.
LIMITED

W. L. HORN, Managing Director

TORONTO, ONT.—2440 DUNDAS ST.
WINNIPEG MAN.—910 SOMERSET BLDG.
MONTREAL, QUE.—370 BEAUMONT AVE.
VANCOUVER, B.C.—1140 HAMILTON ST

SERVICE SPECIALISTS on G. F. E. Fittings, Steam and Hot Water Heating Installations, Power Piping.

WHY COAL SITUATION IS SERIOUS

Shipments from the Alberta coal fields are away below normal. In Eastern Canada, the supply from the American coal fields is being seriously affected by strikes and shortage of labor. Canada's Railway War Board declares it is the duty of every coal importer to release cars promptly.

(From War Board Bulletin No. 10.)

The popular idea that a "coal scare" was being worked up in the United States and in this country, in order to justify profiteering by the coal mines, made it necessary for this Board to hesitate before taking steps to urge Canadian shippers to lay in their coal stocks earlier than usual. Careful inquiry, however, along lines already taken by the American Congress, confirmed the view that the prospective shortage was real, and that Canadian consumers of coal should govern themselves accordingly.

Canada's main sources of coal supply are, roughly, four in number. The Pacific Coast is supplied from Nanaimo, Washington, and, to some extent, Alberta; the Prairie Provinces receive their logical supply from the Alberta and British Columbia mines; sections of Eastern Canada are taken care of by Nova Scotia fields; but the chief supply, and almost the entire amount of anthracite coal, comes from the various mining regions of the United States. As it is in Eastern Canada that the density of population and industrial development is highest, a coal shortage in the United States has very serious aspects for a great proportion of Canadians, and for a heavy percentage of their industries.

The coal supply situation on the Pacific Coast and in the Maritime Provinces may be dismissed as being reasonably satisfactory. On the Prairies a serious shortage exists. The fuel year in the Alberta coal-fields commences on April first. Last year, which was by no means a record year for coal-producing efficiency in the West, there had been shipped between April first and the second week in September 1,313,421 tons of "commercial" coal—as distinguished from coal for railway service. In the same period of the present year only 529,522 tons of "commercial" coal had been shipped. The volume of railway coal shipped was equally low by comparison.

This shortage on the Prairies was, and is, extremely serious. In pre-war years a certain amount of anthracite found its way to the Canadian West, via Ontario, from the American fields. This movement was cut off by war conditions last year, and this year will be very far short of the amount necessary to make up the shortage in Western coal production. The moral for the Western coal consumer is, therefore, to lay in whatever supplies he can obtain just as quickly as he can.

Eastern Canada, almost wholly dependent upon American coal, and particularly anthracite, is intimately involved with the present coal mining situation in the American fields. Strikes cut down the actual working time in important mines. Recently came the exodus of the foreigners, chiefly employed in these mines, overseas. Visits to their native lands, impossible during war time, became so popular as to leave many mines without enough men to do more than guard the property. That situation has slightly improved, but all the mines are running on low production.

One factor is to some extent in the hands of Canadians. Coal-cars are scarce. There are at this date (Oct. 1st.) 12,890 American coal-cars in Canada. Reports to this office show cars held in Canada very much longer than the necessary time for unloading. This sort of thing is grossly unfair to other coal consumers in Canada. Every Canadian importer should endeavor to release coal-cars with the minimum of delay.



CANADIAN MADE

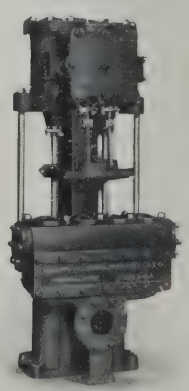
STEEL BARRELS

The modern package for storage and shipping of CANADIAN products.

Can you afford those leaky, wooden barrels?

SMART-TURNER PUMPS

STEM AAND POWER
VERTICAL AND HORIZONTAL



THE SMART-TURNER MACHINE CO. LIMITED
HAMILTON - - - CANADA



Ford Motor Co. of Canada Ltd.
Ford, Ont.

Built by WELLS AND GRAY LIMITED
Engineers and Contractors

WE have built the whole of this plant. We started work in 1910 and have continued without interruption for eight years. Our men are still working on extensions to this plant.

All buildings are permanent, fireproof and modern, reinforced concrete being used almost exclusively.

We have the organization and equipment to handle this work quickly and economically.

WELLS AND GRAY, LIMITED

Engineers and Contractors

Branch Office:
Bank of Commerce Bldg.,
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Castor Oil

Cocoanut Oils

English Degras

We are direct importers of vegetable oils. Can make immediate delivery of Cocoanut and Castor Oils, English Degras and English Linseed Soap.

DOMINION OIL COMPANY
LIMITED
Royal Bank Building
HAMILTON - - ONTARIO



For Full Information Write for Catalog I

Canadian Mathews Gravity Carrier Co., Ltd.
PORT HOPE, ONT.

EDUCATING FOR CO-OPERATION

Educational work is a necessary part of any plan adopted to promote co-operation between employer and employee. Wrong opinions must be counteracted and employers must see that the attitude of employees is such as to enable them to co-operate successfully in the general plans of the business.

By E. O. Davis.
(From the "Textile World Journal.")

Whatever plan you may adopt as a means of promoting co-operation, you will have more or less educational work to do. Some of your employees may be in a mental rut, unable to understand the need of working with you. They may not at first construe the real meaning of any effort you may make along co-operative lines.

The nature of the educational work you must do depends upon the trend of thought of your employees, and right here is where your work must begin. Believe what you may, and practise what you believe if you will, but your progress will be slow unless you deal individually and collectively with the minds of those composing your organization. It is their attitude toward you and your business that you must handle if you would have your employees co-operate with you in making the business a real success.

Your old employees should have a fairly good estimation of you and your business. If they have not, it must be largely your fault. But the new ones will need special attention until they become established in your organization. When a person enters your employment, he either has the right opinion of you and your business, the wrong one, or no opinion at all, but he undoubtedly has some kind of an opinion bearing on the relation of labor and capital. Whatever this opinion is, you and your business are likely to be judged accordingly. If the opinion is an equitable one and the worker has the right sort of ambition, he should easily become a co-worker. If he has no opinion at all, then he should be so instructed in business principles, that when there has been an opinion formed, it will be a just one. But if he has a wrong opinion, it must be destroyed through a right understanding and the practice of business democracy.

In teaching the principles that promote co-operation, nothing is more essential than patience on your part. You must remember that the human mind is usually slow to turn loose the old and grasp the new, and it certainly must have something new to grasp before it can be expected to turn loose the old. A man in this respect is very much like being up in an airplane; he cannot very well get out until he has something besides the air to support him. Neither can a man turn loose of an old idea until he has a new one to catch on to.

We must be sure that our new ideas are more practical and elevating than the old before we offer them to others, and then they may be refused by some. People do not always want to advance. In studying the lives of some people, one is reminded of a body of water, whose only incentive for action seems to be to reach a lower level. This is why there is so much room at the top.

Get your employees interested in something worth while and keep them interested in it. Interest promotes effort. Better start with yourself. Get interested in your employees. Study their desires and needs and meet them so far as is possible and necessary. If you are not already in business, don't start unless you have enough capital to finance some kind of real welfare work. Don't become discouraged if you find an indifferent attitude among the few. Whatever position one may take in anything, it will be the result of conclusions reached by reasoning according to his understanding in the matter. If workers are reasoning along selfish and erroneous lines, and we all do, educate them out of it.

Canadian Carbonate Company, Limited

Offices and Factories:

HALIFAX, MONTREAL, TORONTO

WINNIPEG, VANCOUVER

■

Manufacturers of

"CROWN BRAND" LIQUID CARBONIC ACID GAS

HOYT METAL CO.

Manufacturers of

BABBITT for every use
TYPE METAL
SOLDERS—All grades in bars, pigs or wire
LEAD PIPE, LEAD TRAPS and BENDS
CAME LEAD, PIG LEAD, TIN
ANTIMONY, SPELTER

Factories and Offices:

TORONTO

EASTERN AVENUE AND LEWIS STREET

Factories also in LONDON, NEW YORK, ST. LOUIS, BOSTON

WEST MAY GET A NEW INDUSTRY

Experiments are being carried to a successful conclusion which will prove that straw from flax grown for linseed purposes can be utilized in the manufacture of binder twine. This discovery contains large possibilities for the development of an important industry in Western Canada.

(Public Service Monthly of Saskatchewan.)

Mr. R. J. Hutchinson, the flax specialist at the Central Dominion Experimental Farm at Ottawa, has been making some rigid tests of a new process of making binder twine from flax straw grown for linseed purposes. He has contributed the following report on the matter, from which it is very pleasing to note that in his opinion "binder twine and coarse cordages can be manufactured from the fibre of flax grown for linseed purposes only, and can be placed upon the market with profit to both the consumer and manufacturer." The utilization of this process will mean the saving of a vast sum of money annually, which is now going out of the province, by Saskatchewan farmers who use close to twenty million pounds of twine every harvest.

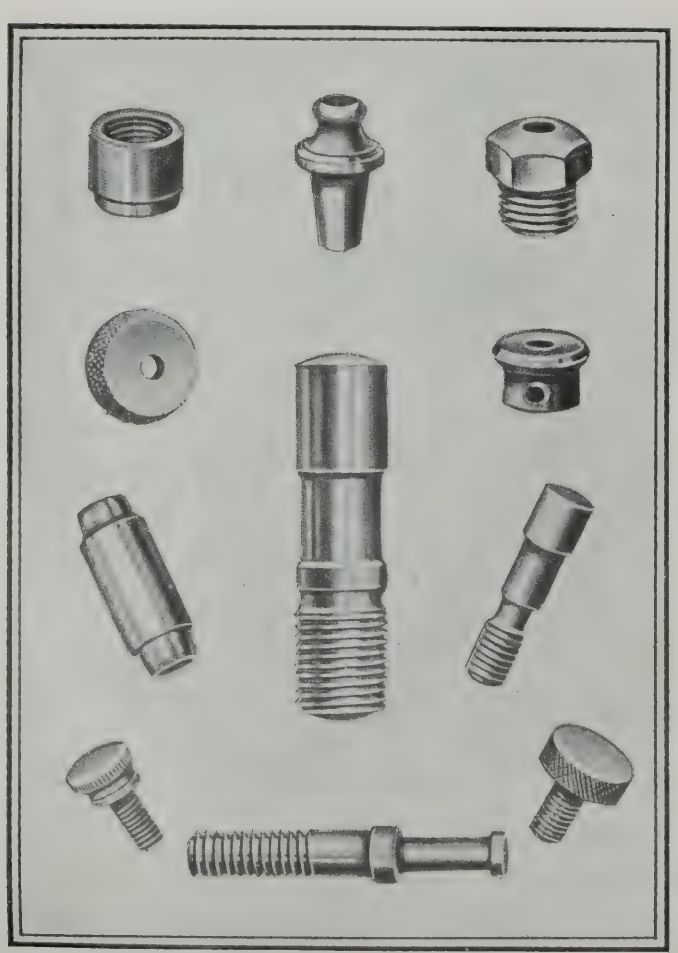
The six divisions of Mr. Hutchinson's conclusions should be carefully read, and it is well to note that a machine has now been successfully devised which removes the main difficulty in the manufacture of flax twine, namely the threshing of the flax without injuring the stalk.

In *The Public Service Monthly* for the month of February, 1918, there was an article upon the above subject which gave the results of an experiment conducted under the auspices of the Saskatchewan Provincial Government with fibre that had been extracted from flax grown in Saskatchewan for linseed purposes only and treated by special process, the property of the Flax Fibre Development Association of Regina. The manufactured articles resulting were binder twines and commercial cordages in large ranges of good quality and appearance and of normal strength. These results were somewhat remarkable, for it had always been considered that western flax was useless when looked at from a fibre standpoint. The mechanical extraction of the fibre and the chemical treatment were carried out in Saskatchewan, while the preparing and spinning was undertaken by a large and well-equipped factory in the United States.

Since the publication of this article the whole matter has been the subject of much attention by both the Saskatchewan Grain Growers' Association and the Federal Government of Canada, and the results as published seem to contain large possibilities for the development of an important industry in the West and the utilization of one of Canada's natural products.

During 1918 the S.G.G.A. undertook to have carried out under their direct supervision a series of experiments with the process to prove the *bona fides* of the claims put forth, and to ascertain what further problems remained to be solved before the utilization of this western fibre could be considered as a possibly successful commercial undertaking.

The quantity of fibre treated and spun under the control of the S.G.G.A. was larger than that treated and spun in the first instance. The results obtained were highly satisfactory and were practically on a par with those already described in the article above referred to. After treatment the fibre passed through the preparing, spinning and twisting machines with a facility equal to linen jute or hemp tow, and with even greater facility than some of the stock that the machines were then working. All original figures were borne out except that there was a slightly heavier loss in working and the yarn spun was 4½ lea instead of 5 lea. This is to



Stamped Metal Parts
AND
Automatic Screw Machine Products

Accuracy in every detail of a given piece of work is equivalent to perfection in the finished product. Our expert workmen handle each proposition in the same efficient manner, giving it the full benefit of their experience and ability, while our modern equipment enabling us to produce large quantities in a short space of time gives us an opportunity of quoting extremely reasonable rates for high-grade work.

Let us quote on your next proposition and convince you.

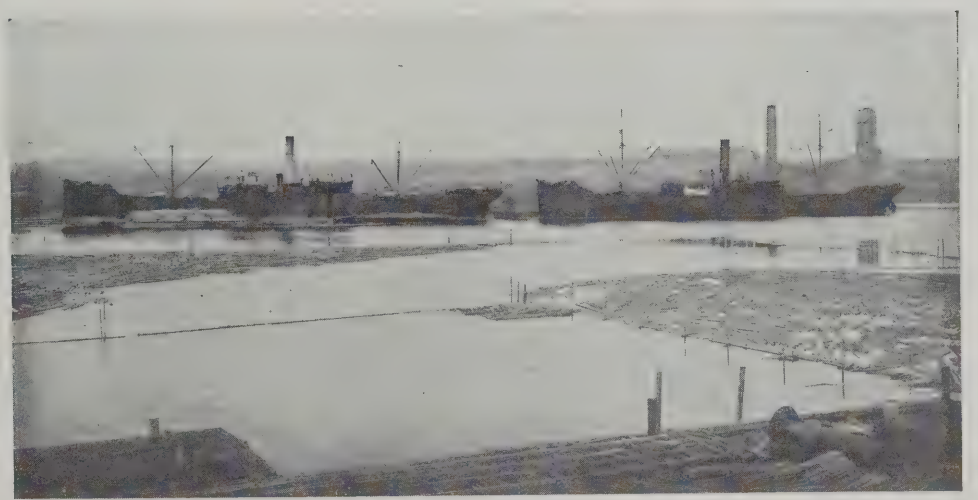
CARON BROTHERS

CARON BUILDING

233-239 Bleury Street, Montreal

BATHURST

SPRUCE AND WHITE PINE



We draw our supplies from timber limits covering over 2,500 square miles. Our plant is complete in every particular and includes fully equipped planing and resaw mills.

Our shipping facilities are unexcelled. The above cut shows the Steamers "Redcap" and "Kyleakin" loading Spruce Deals at our No. 2 wharf at the rate of 650,000 feet per 10-hour day.

KRAFT AND UNBLEACHED SULPHITE PULP

Our output of each is fifty tons daily. Are you on our mailing lists for the periodical bulletins we issue. If not, you are invited to send us your name and address. By so doing you will be kept advised of all the exceptionally good offerings we make from time to time.

BATHURST LUMBER CO., LIMITED
BATHURST, N.B.

McClary's DOMINATING PRODUCTS

To a few are unknown.

To many are never forgotten.

To discriminating housewives the obvious selection.

To observing husbands the cheering factor.

To prospective purchasers a definite association with quality.

To the preceding generation still performing their functions.

To all—definite satisfaction when bought.

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be attributed rather to the equipment at disposal than to the quality of fibre. The spinning end of the experiment was carried out by the only cordage works there is in the Dominion and the equipment is not to be compared with that of the factory which undertook the original experiment.

On the other hand it was proven that the fibre taken from flax that had been threshed with a toothed cylinder would not give the required results. Thus a serious problem arose, as there was no machine extant capable of threshing seed flax without injury to the straw.

On the recommendation of Messrs. Maharg and Musselman, the Federal Government undertook to carry out through the Department of Agriculture experiments which would embrace every phase of the process from the growing flax to the finished twines and that upon a large scale, as this would eliminate the possibility of any special manipulation of small quantities, and confine every step of procedure to being carried out by machinery in productive quantities. It would further test the capacity of every machine brought into operation.

This experiment, while it might not prove the actual cost of production, for specialized buildings, equipment and machinery have not been available, it would nevertheless form a sound basis upon which calculation and estimate could be made.

The experiment is now reaching its final stages and already permits of a general forecast being made.

1. Threshing can be done without in any way injuring the stalk of the flax. A machine was produced and flax was efficiently threshed in the factory. This machine has now been adapted for outdoor threshing, and will be tested in the fields.

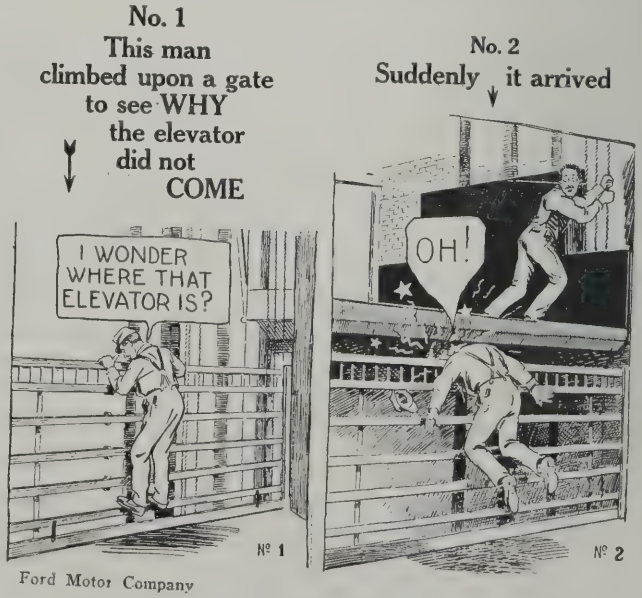
2. Decortication or separating the fibre in its crude state from the flax by mechanical means gives the calculated amount of fibre per ton of straw.

3. The chemical treatment in quantities has been done more rapidly and economically than was estimated to be possible.

4. The preparing and spinning give the results already known, and at the price estimated.

5. The manufactured products are equal in quality and appearance to those produced on previous occasions.

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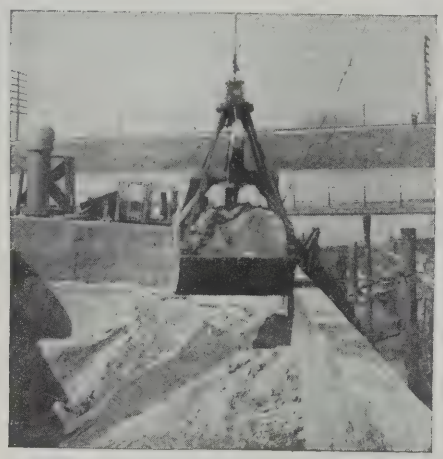
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DOUBTFUL ABOUT PROFIT SHARING

President of the Link-Belt Company in a recent address before the Illinois Manufacturers' Association says profits of average business are rarely sufficient to make a worth-while distribution. He is also rather dubious about feasibility of taking labor into partnership. Here follow some extracts from his speech.

By Charles Piez.

One suggestion to improve the employment relationship has been profit sharing, and new experiments are being tried at every hand. I am highly interested in the results, but as a means of allaying unrest and satisfying the worker, I am afraid most of these experiments are foredoomed to failure. The schemes that succeed will succeed because of the personality of the man behind them, and not because of the merit of the schemes. Profit sharing as it is usually applied, involves payment to the deserving and the undeserving; to the ambitious, energetic, useful employee, and to the laggard who succeeds in just getting by. It is apt to result, therefore, in general dissatisfaction, and a lowering of the standard of efficiency. Many plans have been tried, but a small fraction survive. The profits of the average industry are rarely sufficient to make the amount distributed to the individual large enough to stimulate and retain his interest, and only exceptional industries like that of Mr. Ford can continue to make really effective distribution. I like Mr. Ford's plan, for it consists in paying high wages and insisting that the employees earn them. My own conviction is that the best system for profit sharing consists in the opportunity for earning liberal wages for a standard amount of work performed, and that extra effort and output or extra quality, ought to entitle the man to earn wages in considerable excess of the prevailing rates. This gives the man an immediate additional return on work that is within his own control, and does not force him to wait until the end of the year for an indefinite share in an uncertain profit.

The idea of taking labor into partnership is offered as another remedy. It sounds alluring, but, like profit sharing, is another one of those schemes it is difficult to make workable and permanently effective. In the first place, the average industry, with an investment of, say, $2,000 per employee, rarely earns in normal times as much as $1.00 per employee per day. When the return for capital invested is set aside and provision is made for necessary additions and extensions, there is little or no cash to divide, and there is general disappointment among the partners. If any division is made, it must be made in stock, or its equivalent—it can't be made in cash.

And yet I am strongly convinced that a real pecuniary interest by the employees in an industry is a good thing, provided that interest is paid for. Partnership must carry with it a sense of responsibility in the pecuniary success of the venture, and cannot be helpful or effective if it represents an association in which one partner is purely interested in securing all he can for himself, without thought of the continued strength and success of the venture. I am in favor of opening up the opportunity for acquiring a stock interest in an industry, to every workman whose length and character of service justifies it, and who has the nerve to assume the responsibility to pay for that interest in cash. And when the stock acquired by workman and employees reached a proper volume, I would gladly welcome a representative of their choosing, as a member of the Board of Directors. Representation on the Board, except on the basis of stock interest, would not and could not bring about the purpose which the proponents of this suggestion have in mind.



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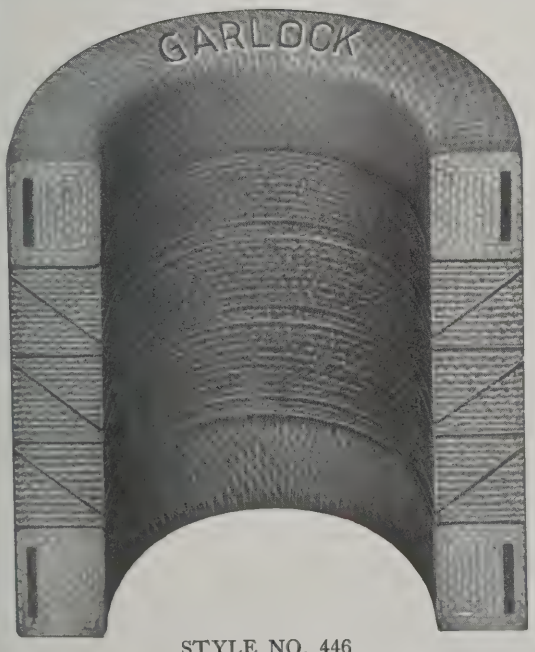
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WELFARE WORK IS NOT CHARITY

Employers work on an entirely wrong basis when they regard welfare work as a species of charity. Nor should they take it up as a sort of hobby. There is nothing substantial in such methods and they will not stand the test. They are never lasting and their failure brings discouragement.

By E. O. Davis.
(From "Textile World Journal.")

There is a need of a certain kind of welfare work among the employees of all business establishments. But not in the form of charity. To provide such necessaries as comfortable working and housing conditions, also recreation facilities, is not charity. These are essentials, just as food and clothing are, and all of them are practical means of building up a spirit of co-operation. In fact, to provide them is co-operation on the part of the employer. Sharing profits, when practical, in the form of a dividend is a splendid plan, but every man or woman should receive according to his or her earning capacity.

I do not advocate any scheme that would take from the employer his personal rights in the operation of his own business. Nor do I believe in the distribution of industrial earnings except in the form of a fair compensation as a reward for honest effort and a legitimate profit on financial investment.

I never did believe in a mere fad or some sort of pet hobby as a means of building up a spirit of co-operation. There is nothing substantial in such methods. They are not lasting because one is likely to become tired of and disinterested in them, and the channel through which you had intended to teach your employees has vanished and you are worse off because of your experience, unless it has helped you to think along more practical lines. This, however, is not always the case, because a failure in the first attempt too often discourages the employer, also the employee, and leaves a feeling that, after all, the only thing worth while is the object of making money for one's self. But this most certainly is a mistake, because the hope of financial gain as the principle incentive for action can never develop the higher ideals in man, and the salvation of any business, or of the world in fact, is dependent upon the human race understanding and putting into practice these higher ideals.

There are some who still hold that all compensation should be included in wages, in which instance a man can invest his earnings according to his individual needs. The main objections to this plan are that it prohibits civic improvement and fathers selfishness. It puts industry back to the sweat-shop basis and continues to crown the dollar as lord of all. Proper environment is just as essential for an individual business as for a community, and money spent for such purposes should be regarded the same as taxes paid into the treasury of a commonwealth, a large per cent. of which is usually used for civic betterment.

Money taken from the employees' wages (if you wish to term it as such) and used for industrial civic improvement is a financial investment in the business for the employee. It gives him a personal interest in the business that will inspire individual effort and promote a general good feeling for the welfare of the business, the result of which will be better efficiency, and better efficiency means larger earnings and still higher wages, so that in the end you have your desirable surroundings, co-operation, contented employees, good wages and larger profits for the stockholders. Isn't this what we really want and need?



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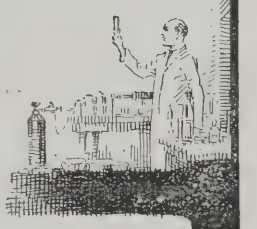
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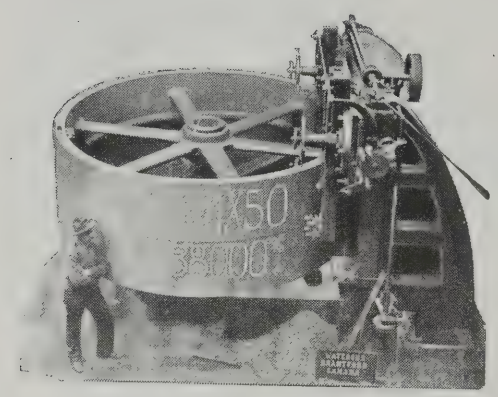
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THE RIGHT ATTITUDE TO LABOR

Co-operation between employer and employee is declared by this writer, who is secretary of an American hosiery company, to be one of the most essential elements in any industry. Anything that will tend to build up this co-operation should be regarded as necessary to the success of business.

By E. O. Davis.

(From "Textile World Journal.")

Everyone is familiar with the Bible story of the young man who inquired what he must do to be saved, and, when told, went away sorrowing because he was required to adopt a new plan of salvation. From the description of this fellow, one would infer that he was a modern manufacturer or business man.

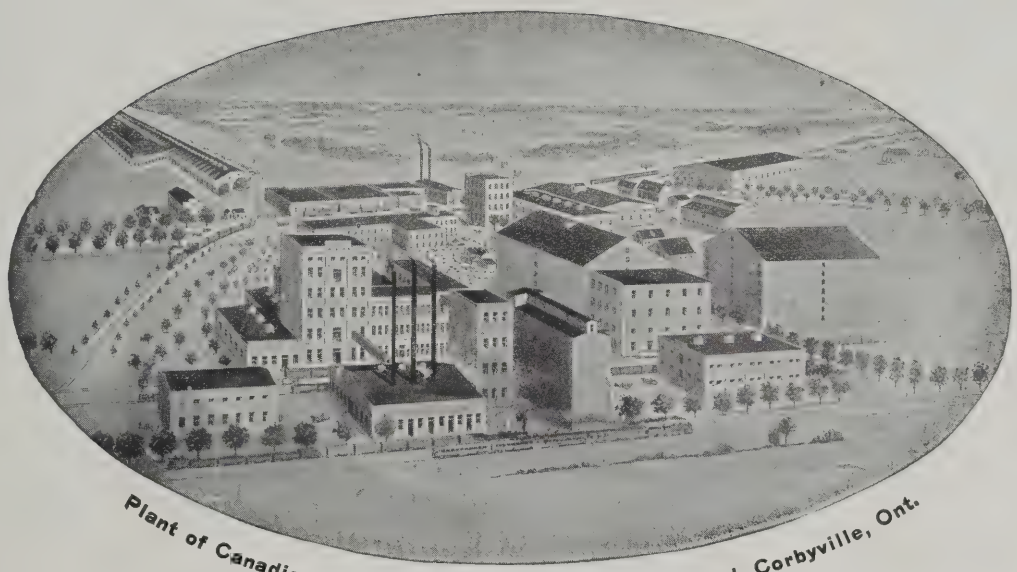
If our present business methods were entirely practical we would not need a change. Judging from the present state of affairs in some localities, it would seem that we are not using the right principles and that our entire system is wrong. This, however, is not altogether true, and besides, the customary usage of present methods makes it unsafe to adopt any radical changes. But this does not prohibit a man from doing things differently, provided he does not go beyond the reasoning faculties of his co-workers, or undertake some project which he has not the time nor the funds to carry out.

There are many factors in the make-up of any business; some are more important than others, while some few are indispensable. Of the more important, co-operation between employer and employee is one of the most essential elements in any industry. It is also one that has possibly been neglected more than any other, not so much from our lack of having seen the need of it, as on account of our inability to formulate some practical means of making it a reality. All seem willing to admit the need of a better understanding between labor and capital, but how many are willing to take the time and trouble to work out some practical, unselfish plan that will be most suitable for his individual business? Individual your business is, and individual your organization must be, but the purpose and aims of those composing an organization should never be individualized at the expense of the business as a whole.

Anything that will help to build up and maintain a lasting spirit of co-operation between employer and employee must be regarded as necessary to the success of any business, and a business cannot be a complete success unless employer and employee work for each other's interests. The maximum success may be derived from any co-operative plan by intelligently choosing between the things we would like to do and the things most practical for that individual business.

Men have told me that they had used their utmost efforts to get their employees to co-operate with them. But did they use the same effort to co-operate with their employees? Was it co-operation they were really after? Was it their earnest desire to pool their assets with those of their employees in a common investment for the purpose of making the business a success for all? And were they willing to share the profits of that business with their employees in proportion to the investment of each, be that investment either money or labor? If not, then why call it co-operation at all, when their only purpose was to increase their own earnings? Give your employees credit for being able to distinguish between selfish and unselfish plans which you would have them adopt. If you are practising selfishness yourself, you are teaching it to your employees. You are training them to work against you and your interests as well as their own.

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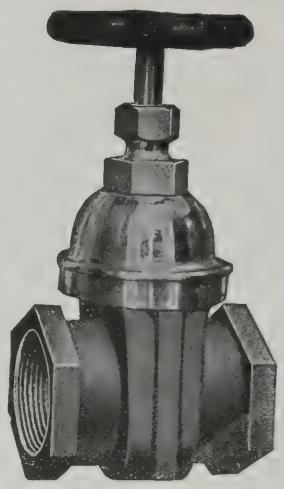
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AERIAL FORESTRY COMES TO STAY

Flights made this summer in the St. Maurice Valley demonstrate efficiency of the seaplane in determining location of forest fires and providing prompt means for extinguishing them. The moral effect of having a plane suddenly appearing over a fire just started will be of value as a deterrent.

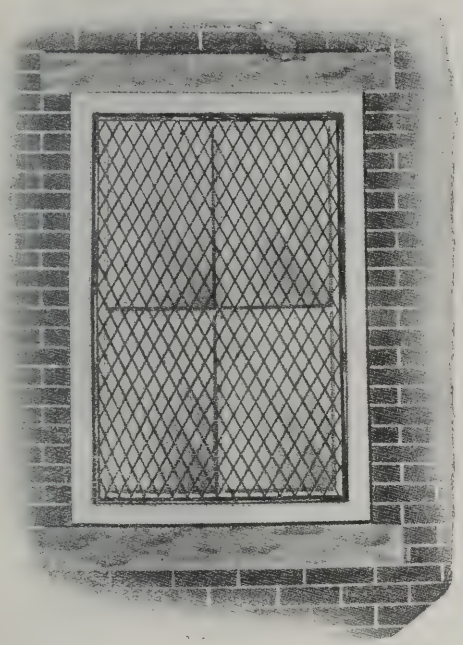
(From the Laurentide "Digester.")

The aerial service inaugurated by the St. Maurice Forest Protective Association in co-operation with the Department of Lands and Forests of Quebec and the Dominion Department of Naval Affairs has now been carried far enough to give some indication of its probable value. Owing to difficulties in making an agreement between the Government and the Association, it was the middle of June before the seaplanes were released at Halifax, and by the time they were overhauled and ready to fly, July was at hand. The two successful flights made by Lt. Graham from Halifax, demonstrated their value for long distance work and reliability. Immediately on arrival at the base on Lac a la Tortue, near Grand-Mere, flying commenced and trips were made to all parts of the St. Maurice Valley. Some fires were seen and their location and size accurately determined by flying over them. It was found feasible to transport a Johnson fire pump and hose to any crew needing it. A fire anywhere in the 16,000 square miles could be reported inside of two hours, and in another two hours a pump could be on the lake nearest the fire. The moral effect of having a plane suddenly appear over a fire just started and the possibility of detecting the person who set it will certainly be of value as a deterrent.

For transporting persons who have business at different points in the woods the planes are invaluable. The Manager of the Association could be taken within two hours, or two and a half at the most, to any part of his district. The Superintendent of Logging Operations could go to any part of his operations, have time for inspection and return the same day. Men who were injured in camp or taken ill could be brought out, in the utmost comfort, and taken to a hospital. Unfortunately the men who can benefit by the use of the planes have not taken advantage of them, although it is hoped they will do so before the season is over.

For exploration work they are invaluable. Five hundred square miles were covered and notes made of the location of burns, lakes, timber, etc., and some photos taken in two hours, and the writer came back with a far better idea of the country than if he had travelled over it for two months. Types of timber are easily distinguished. Areas of burns can be located; one can tell whether the burns are beginning to restock or not. Anyone wanting to buy a piece of timber land could tell in an afternoon's flying whether it would be worth purchase or not. The manager or any other official of a timber holding concern could, in a few days' flying, learn more about the location and value of his timber than he could get in volumes of reports.

In flying over forested land the different kinds of trees are quite distinct, especially as the leaves turn. Lakes are very dark in color, almost black, and shoals and rocks can be plainly seen. Sandbars under water in the rivers are yellowish and plainly visible. There is not much sensation of speed unless you watch some point directly below you or which you are approaching. All the details of the terrain are plainly visible. Burnt areas show plainly, pure stands of spruce and balsam show up so that the individual trees can be counted.



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EFFECT OF PAMPERING WORKMEN

Dealing editorially with the National Industrial Conference, the Farmers' Advocates points out that prices are high because raw materials are scarce and raw materials are scarce because conditions have been made more agreeable for workmen in the factories than on the farms. This is an interesting commentary from the agricultural standpoint.

(From the "Farmers' Advocate.")

We have no intention at this time of discussing all the features of the conference. It immediately arrived at a harmonious decision that labor legislation should be uniform throughout the different provinces. Then immediately there were differences of opinion as to collective bargaining and hours of labor. The labor delegation stood out strongly for an eight-hour day and a 44-hour week. At this point, Hon. Chas. Dunning, Minister of Agriculture for Saskatchewan, and a member of the third group, drew attention to the fact that an eight-hour day on the farm was impossible. In fact any set hours of work on a farm are impossible. If a legal eight hour day was set it would vitally affect agriculture in an adverse way was the substance of Mr. Dunning's statement to the conference.

It is about time that those who may be included in organized labor and those who may be included in organized capital and industry came to a realization that to-day's problems cannot be settled by them getting their feet together under a table. The majority of people in Canada come entirely outside of both these classes combined. It might come within the possible that these two classes could settle their differences as to hours of work per day, working conditions, wages or share of profits, and have legislation passed that would include all this. What is more, the two parties might live up to these conditions and yet it might prove a national calamity, for outside these two classes comes agriculture, the first industry of the nation, which popularly is not even considered an industry, and there are a hundred other professions and industries also not considered that, with agriculture, make up the greater part of Canada's population. Our so-called industries and our organized workers are in some ways taking themselves too seriously. Food prices and clothing prices are not alone high because of profiteering. They are high because there is a shortage of the raw commodities that make up our foods and clothing, and there is a shortage because conditions have been made more agreeable for our workmen in the factory than it can be made on the farm. Not only has labor on farms left for the city, but farmers themselves have left to join the ranks of labor in the city. Even improved agricultural machinery that reduces labor is failing to keep up the needs of food. The fact that the prices of raw food and raw materials for clothing have gone up has taken few men to our farms, because the cost of producing these materials has increased proportionately.

We wish to state merely that no permanent solution of the disputes between capital and labor can be arrived at without placing the matter before every class in the Dominion. The Parliament of Canada is the proper place to carry on a discussion of the matter rather than a conference of picked delegates. However, the present Parliament is largely made up of professional politicians. We hope that our next Parliament will be more truly representative of the people. We are satisfied at least that agriculture will be much better represented and that policies affecting industry will more nearly meet its needs.

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While that extremely useful mineral, asbestos, is widely distributed, the deposits as a rule have little value except in the province of Quebec. Here a fine variety is found and mining asbestos has become an important industry, the province being to-day the world's chief source of supply.

By W. F. Sutherland.
(From "Scientific American.")

At the present time the Province of Quebec is the world's chief source of asbestos, the production in other countries being comparatively small. Russia is the chief producer outside Canada, the asbestos being mined in the Ural district. Before the present trouble in Russia most of the Russian asbestos was either used locally or exported to Germany, a little reaching the United States.

Geographically asbestos is a widely distributed mineral, although many of the deposits are of little value commercially. The United States has many deposits, Newfoundland has large deposits of good quality and Italy was formerly a large producer. China, Siberia, Australia, New Zealand and South Africa have also deposits which may be of use in the future. The South African fibre is of very good quality and the mines are being rapidly developed.

Two varieties of asbestos are met, amphibole and chrysotile. The amphibole or hornblende asbestos is much inferior to the chrysotile, having none of the fineness of fibre, the tensile strength, the elasticity nor the flexibility of the chrysotile. It also differs in chemical composition from the chrysotile in having lime associated with its magnesia, while the chrysotile is a hydrated silicate of magnesia. The Canadian deposits of asbestos are of the variety known as chrysotile and it occurs only in a serpentine rock to which it is essentially similar in chemical composition. Serpentine in itself is very similar to peridote, a rock in which it is usually found, differing only in being hydrated.

Open-pit mining or glory-hole work is used throughout the Quebec district, the mines running sometimes to a depth of 300 feet. Underground work is carried on at some of the mines during the winter months, and searchlights have been employed to render night working possible. Some of the mines separate the barren rock from the asbestos-bearing portion in the pit, and each is loaded into separate boxes. In most, however, the hand separation commences after the rock reaches the surface by means of the aerial cableways, or by other means.

After the hand separation the barren rock goes to the rock pile and the rock which will afford crude asbestos is taken to the cobbing sheds where it is separated by hand and the asbestos bagged. The remainder, usually 35 per cent. to 70 per cent. of all rock handled and which contains asbestos requiring mechanical separation, goes to ore bins or in some cases directly to the mill for concentration. For the first fifteen years after the opening up of the asbestos mines, cobbing was the only means of recovering asbestos, but in 1893 the process of mechanical concentration now used, with but slight modifications, was devised.

Practically all the mills use the same system for the separation of the asbestos, and considerable ingenuity is displayed in its carrying out. The milling practice consists essentially of coarse crushing, drying and alternate fibre crushing and screening. At each screening the asbestos then liberated is drawn off through overhead pipes by suction bands and collected in settling tanks. When thoroughly screened from dust and classified according to length of fibre by rotary screens the different grades pass to their respective storage bins or are bagged for the market.



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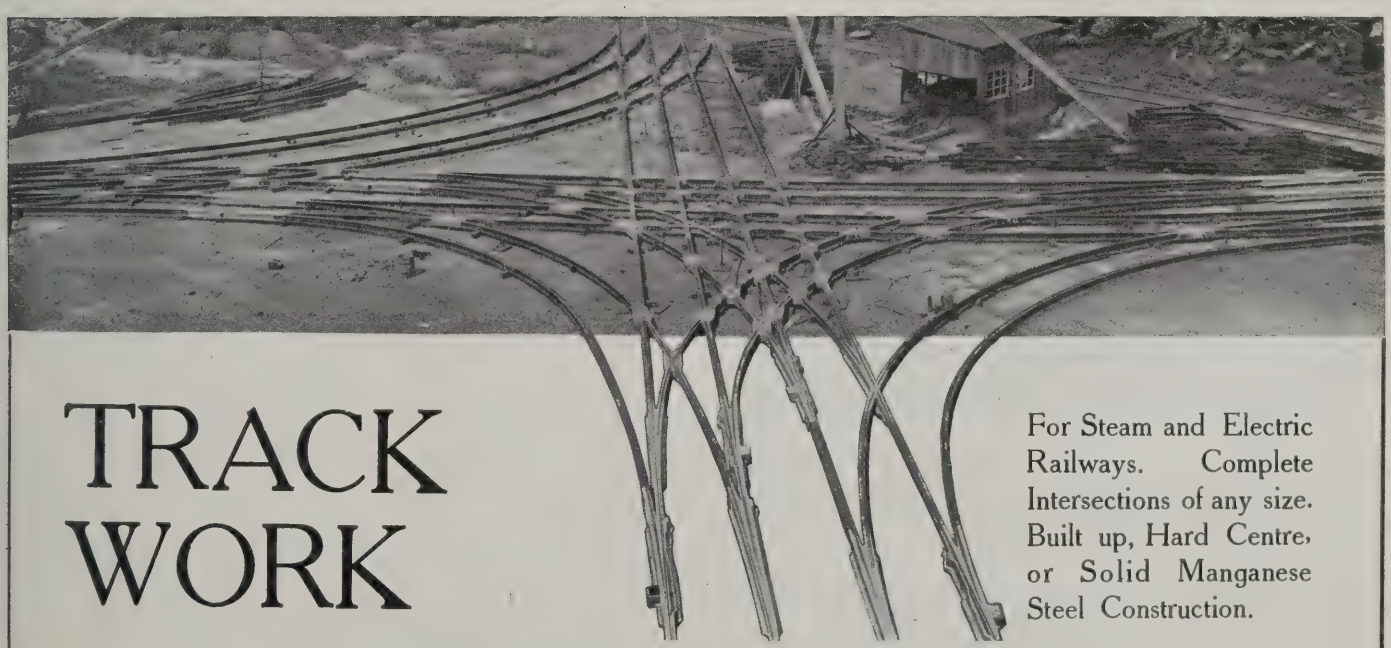
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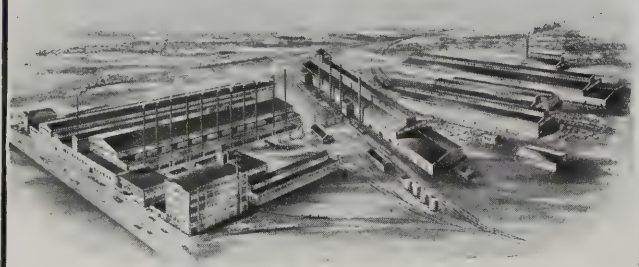
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GOING BACK ON THE STOP-WATCH

An industrial expert, who has always advocated the use of the stop-watch in studying operations, changes his opinion and declares that good results can be secured from industrial management without employing a stop-watch at all; the greater part of the inefficiency being attributable to the shortcomings of management.

By C. E. Knoeppel.

(Reproduced from "Scientific American.")

In writings and addresses in the past, I have advocated the use of the stop-watch. I have used it in my professional work. I have instructed others in its use, and have had others use it for me. Some four years ago, however, I began to see evidences of its unpopularity in industry, and began to study the entire situation with the view to getting along without it. Since that time the organization of which I am head has made no use of the stop-watch in its regular work of eliminating industrial inefficiency. We see no use for it in the future, in so far as we are concerned, for excellent results have been and can be secured without its use.

The inefficiency almost universally met with in industry, which is the one factor responsible for the high prices we are now fighting, is not all due to the inefficiency of the worker by any means. As a matter of fact the *greatest part of the inefficiency found is due to the shortcomings of management.* Unless a plant is properly organized; unless there are reliable records on which to base conclusions; unless production is properly controlled; unless working conditions and facilities are what they should be, workmen cannot work efficiently, whether they want to or not.

Idleness in equipment; waste in floor space; inadequate manufacturing facilities; too much material tied up in stock; over-equipment; break-downs and repairs in equipment during working hours; failure to provide work or material or tools on time; these are certainly factors not within the control of the workers in a plant. This does not mean that there is no inefficiency on the part of the workers, but it does mean that the greatest inefficiency is that of management and that you cannot get a high degree of labor efficiency with a low management efficiency.

Our experience proves further that through efficient organization, proper records, control of production and improved facilities, manufacturing efficiency can be materially increased, and in accomplishing these things we have found that no stop-watch is at all necessary.

This brings us up to the matter of the worker's part in industry. There are seven essentials necessary in industry:

(1) Supplying the funds; (2) providing the plant; (3) furnishing equipment; (4) providing an organization; (5) placing orders for work; (6) supplying material; (7) doing the work. In the first of these capital is concerned; the next five fall within the province of the management; labor is concerned with only one of them—doing the work. In this the element of time enters, and the thought behind the use of the stop-watch has been to study this use of time by labor.

It is of course true that labor has felt that the less hours it worked the *more* work there will be for *more* people. In some cases labor has even gone so far as explicitly to take the attitude that it ought to reduce the amount produced per hour in order to "make jobs' for more men. So in our experience we have been observing a three-fold tendency:

(*a*) Less hours work per man; (*b*) less production per hour per man; (*c*) greater wages per hour per man; which is the basis of the vicious cycle of increasing prices.

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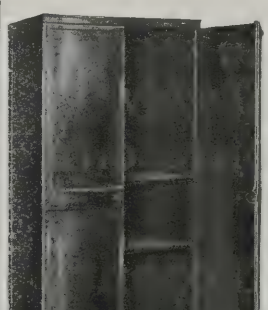
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GIVING EMPLOYEES INFORMATION

Under the plan of employee representation through works councils in the International Harvester Company's plants, the men are shown figures which it had been the custom of the company to keep secret. Thousands of men, when given this information, have been able to use it intelligently and act wisely upon it.

By Cyrus McCormick, Jr.
(From the "Manufacturers' News.")

Those men who object to employee representation argue that employees are more interested in high wages; that they will elect undesirable or incapable representatives; that they will break down the discipline of the shop, and that it is merely an invitation looking toward the ultimate establishing of a closed shop. In reply to those objections, I believe that while it may be argued that the point of view I have followed is a matter of opinion, no one has suggested a more constructive arrangement for settling the differences between employers and employees. Secondly, our experience indicates that as often as not the men ask for shorter hours rather than higher wages. They are interested in living happily, and they feel that employee representation is giving them a better chance of livelihood.

To others who claim that a group of American employees will not elect men capable of upholding the confidence reposed in them, I quote figures to indicate the stable characteristics of men chosen by the employees of the International Harvester Company as their representatives. The average of these representatives throughout our company is about 37 years. Three-fourths of them are married. Their average employment with the company is over seven years, and a large number own their own homes or stock in the company. They are required by the plan to be American citizens, but that has not prevented the election of a large number of good Americans born in foreign countries, some of whom have proven themselves in common council far above the average ability. I do not pretend to say that we do not have any radicals among the number, but their presence has only served to make the discussion keener and to prove to us that our plan was really democratic in basis. The men, of their own free will, have chosen responsible representatives whose opinions are valuable for what they are.

The workings of the plan have called upon the representatives of the men and management alike to put forward their keenest intelligence. In the beginning it was quite natural that the first demands were all for large increases in wages. The plan passed successfully a very severe test when it had to be explained to the men, through their representatives, that the financial condition of the company and of the business were not such as to justify a flat increase of wages. Later, when the cost of living rose again, as it did last summer, the question was again brought up, and this time the management representatives accepted the point of view of the employee representatives just as sincerely and fairly as in the beginning the latter had accepted the view of the former. The International Harvester Company, since the inception of its plan of employee representation, has never held back any information from the men. Business policies have been discussed and figures shown which it was our former custom to keep secret. We share their pride in the fact that thousands of men, when given this information, have been able to judge it intelligently and act accordingly.

The company has also been able to discover many inequalities in the wage scale which it did not dream existed.

Buyers' Guide to Canadian Manufactures

List of Articles which will Enable the Purchaser to Know the Manufacturers of Made-in-Canada Goods. For Rates of Insertion in this Department write to the Advertising Manager of INDUSTRIAL CANADA, C.M.A., Toronto, Ont.

ABATTOIR MACHINERY AND SUPPLIES
*The John Whitfield Company, Toronto, Ont.
ABRASIVES
*Coralox, Limited, Hamilton, Ont.
*Canadian Hart Wheels, Limited, Hamilton, Ont.
*Dominion Abrasive Wheel Co., New Toronto, Ont.
ACCOUNT BOOKS
*The Brown Bros., Ltd., Toronto.
ACCUMULATORS, hydraulic
*The Hydraulic Machinery Co., Limited, Montreal.
ACETYLENE GAS
*The Prest-O-Lite Company of Canada, Ltd., Toronto, Ont.
ACETYLENE GAS BURNERS
Economic Acetylene Burner Co., Toronto, Ont.
*The Prest-O-Lite Company of Canada, Ltd., Toronto, Ont.
ACID PROOF COATINGS
*Beveridge Paper Co., Ltd., Montreal and St. John, N.B., Supply Department.
ACIDS
*The Grasselli Chemical Co., Ltd., Toronto.
*The Nichols Chemical Co., Ltd., Montreal, Que.
ADVERTISING NOVELTIES
Lawson & Jones, Ltd., London, Ont.
AERATED BEVERAGES
Charles Gurd & Co., Ltd., Montreal, Que.
J. J. McLaughlin, Ltd., Toronto.
AIR COMPRESSORS
*Canadian Ingersoll-Rand Co., Montreal, Que.
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.
AIR DRILLS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
ALCOHOL
*Canadian Industrial Alcohol Company, Ltd., Montreal, Que.
Hiram Walker & Sons, Limited, Walkerville, Ont.
ALUMINUM
*Northern Aluminum Co., Ltd., 1805 Traders Bank, Toronto,
ALUMINUM CASTINGS
*Tallman Brass & Metal Co., Hamilton, Ont.
AMMONIA
Canadian Ammonia Co., Ltd., Toronto, Ont.
ANCHORS, all steel
Beauchemin & Fils, Ltd., Sorel, Que.
ANGLE BARS
*Burlington Steel Co., Ltd., Hamilton, Ont.
*MacKinnon Steel Co., Limited, Sherbrooke, Que.
*The Steel Company of Canada, Ltd., Hamilton, Ont.
ARSENIC
*Deloro Smelting & Refining Co., Limited, Deloro, Ont.
ARTIFICIAL LIMBS
Chesley Artificial Limb Co., Ltd., Hanstport, N.S.
ASBESTOS
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.
ASBESTOS SHEATHING
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.
ASBESTOS SHEET AND PISTON PACKINGS
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.
ASBESTOS STEAM PIPE AND BOILER COVERINGS
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.
ASBESTOS TEXTILES
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.
ATTACHMENT PLUGS
*Crouse-Hinds Co., Ltd., Toronto.
AUTOGRAPHIC REGISTERS
*Autographic Register Co., Ltd., Montreal, Que.
AUTOGRAPHIC REGISTER SYSTEMS
Business Systems, Ltd., Toronto.
AUTOMOBILE ACCESSORIES
*McKinnon Industries Limited, St, Catharines, Ont.
*Northern Electric Co., Limited, Montreal, Que.
*Tallman Brass & Metal Co., Hamilton, Ont.
AUTOMOBILE PARTS
*Dominion Forge & Stamping Co., Walkerville, Ont.
*McKinnon Industries Limited, St. Catharines, Ont.
AWNING CORD (cotton)
Hamilton Cotton Co., Hamilton, Ont.
AXLES
Canada Forge Co., Ltd., Welland, Ont.
Guelph Spring & Axle Co., Ltd., Guelph, Ont.
AXLES, carriage and automobile
Guelph Spring & Axle Co., Ltd., Guelph, Ont.
BABBITT METAL
Alonzo W. Spooner, Ltd., Port Hope, Ont.
*Hoyt Metal Co., Toronto, Ont.
*The Canada Metal Co., Toronto, Ont.
*Tallman Brass & Metal Co., Hamilton, Ont.
BACON
E. W. Fearman Co., Ltd., Hamilton, Ont.
BAGS
*Scythes & Co., Ltd., Toronto.
BAGS, Cotton
The Canadian Bag Co., Limited, Montreal, Que.
BAGS, jute
The Canadian Bag Co., Limited, Montreal, Que.
*Scythes & Co., Ltd., Toronto.
BAGS, travelling
J. Eveleigh & Co., Ltd., Montreal.
Lamontague, Ltd., Montreal, Que.
The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto, Ont.
BAND RESAWS
*Canada Machinery Corporation, Limited, Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
BAND SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.
BANK FITTINGS
The Canadian Office & School Furniture Co., Ltd., Preston, Ont.
BANK AND OFFICE RAILINGS AND CAGES
*Canada Wire and Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
*The Geo. B. Meadows, Toronto, Wire, Iron & Brass Works Co., Ltd., Toronto, Ont.
BANK SIGNS AND FITTINGS
*Tallman Brass & Metal Co., Hamilton, Ont.
BARRELS, steel, and containers
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.
BARS, iron
London Rolling Mill Co., Ltd., London, Ont.
BARS, steel
London Rolling Mill Co., Ltd., London, Ont.
BASEBALL GOODS
A. J. Reach Co., Brantford, Ont.
BATHS, enamelled
Amherst Foundry Co., Ltd., Amherst, N.S.
BATTERIES, dry
The Canadian National Carbon Co., Ltd., Toronto, Ont.
BATTERIES, Flashlight
The Canadian National Carbon Co., Ltd., Toronto, Ont.
BATTERIES, Storage
The Canadian National Carbon Co., Ltd., Toronto, Ont.
BEARINGS
*The Chapman Double Ball Bearing Co., Ltd., Toronto, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
BEARINGS, bronze
*Tallman Brass & Metal Co., Hamilton, Ont.
BEARINGS, pillow block and upright
*Canadian Fairbanks-Morse Company, Ltd., Montreal, Que.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
BEDS, camp folding
*Otterville Mfg. Co., Ltd., Otterville, Ont.
BEEF
E. W. Fearman Co., Ltd., Hamilton, Ont.
BELTING, chains
*Canadian Link-Belt Co., Toronto.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
BELTING, elevator
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto, Ont.
BELTING, leather
The Beardmore Belting Co., Ltd., Toronto, Ont.
*J. L. Goodhue & Co., Danville, Que.
*Sadler & Howarth, Montreal.
*The D. K. McLaren Belting Co., Ltd., Montreal, Que.
*The J. C. McLaren Belting Co., Ltd., Montreal, Que.
BELTING, rubber
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Dunlop Tire & Rubber Goods Co., Ltd., Toronto, Ont.
*Gutta Percha and Rubber Ltd., Toronto, Ont.
BELTING, stitched cotton duck
*Dominion Belting Co., Ltd., Hamilton, Ont.
BENT GOODS
The Crown Lumber Co., Woodstock, Ont.
BICYCLES AND ACCESSORIES
*Canada Cycle and Motor Co., Ltd., Toronto, Ont.
BISCUITS
The Montreal Biscuit Co., Montreal, Que.
BLACK SHEETS
*A. C. Leslie & Co., Montreal, Que.
BLANKETS
Slingsby Mfg. Co., Ltd., Brantford, Ont.
J. Walsham & Son, Ltd., Bolton, Ont,
BLANKETS, horse
Slingsby Mfg. Co., Ltd., Brantford, Ont.
J. Walsham & Son, Ltd., Bolton, Ont.
BLASTING ACCESSORIES
Canadian Explosives, Ltd., Montreal, Que.
BLEACHING POWDER
Canadian Salt Co., Ltd., Windsor Ont.
BLOWERS
*Sheldons, Ltd., Galt, Ont.
*The Canadian Blower & Forge Co., Ltd., Kitchener, Ont.
BOARDS, paper, fibre, press
*Beveridge Paper Co., Ltd., Montreal and St. John, N.B., Supply Department.
BOATS OF ALL KINDS
Peterboro Canoe Co., Ltd., Peterboro, Ont.
BOBBINS
Canada Spool & Bobbin Co., Ltd., Walkerton, Ont.
BOILER COMPOUND
*Beveridge Paper Co., Ltd., Montreal and St. John, N.B., Supply Department.
BOILER COMPOUND AND OILS
Electric Boiler Compound Co., Ltd., Guelph, Ont.
BOILER LININGS AND COVERINGS
*Beveridge Paper Co., Ltd., Montreal and St. John, N.B., Supply Department.
BOILERS
*M. Beatty & Sons, Ltd., Welland, Ont.
*Darling Bros., Montreal, Que.
*Goldie & McCulloch Co., Limited, Galt, Ont.
*Lauzon Engineering Ltd., Levis, Que.
*E. Leonard & Sons, Ltd., London, Ont.
J. & R. Weir, Montreal, Que.
Taylor-Forbes Co,, Ltd., Guelph,
*The Waterous Engine Works Co, Ltd., Brantford, Ont.
BOILERS, hot water or steam
Steel & Radiation Ltd., Toronto.
Warden King, Ltd., Montreal.
BOILERS, steam
Canadian Ingersoll-Rand Co., Sherbrooke, Que.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
BOILERS, steam and brass work
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
BOILER STANDS
Anthes Foundry Ltd., Toronto.
BOLSTERS
*Canadian Car & Foundry Co., Ltd., Montreal, Que.
BOLTS AND NUTS
*The Canadian Tube & Iron Co., Ltd., Montreal, Que.
*The National Acme Mfg. Co., Montreal, Que.
*The Steel Company of Canada, Ltd., Hamilton, Ont.
Starr Mfg. Co., Ltd., Dartmouth, N.S.
BOOKBINDERS
R. G. McLean, Toronto.
*The Brown Bros., Ltd., Toronto.
The Mortimer Co., Ltd., Ottawa, Ont.
BOOKCASES
*Office Specialty Mfg. Co., Ltd,, Newmarket, Ont.
BOOKCASES, sectional (Gunn)
The George McLagan Furniture Co., Ltd., Stratford, Ont.
BOOKLETS
R. G. McLean, Toronto.
BOOKS, blank
*The Brown Bros., Ltd., Toronto.
BOOTS AND SHOES
Ames-Holden-McCready, Limited, Montreal, Que.
J. Leckie Co., Ltd.
The John Ritchie Co., Ltd., Quebec, Que.
BOXES
*Crouse-Hinds Co., Ltd., Toronto.
BOXES, cellular board
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls.
BOXES, rattle and soap
The Arlington Co. of Canada, Ltd., Toronto, Ont,
BOXES, steel shop
*Steel Trough and Machine Co., Ltd., Tweed, Ont.
BOXES AND SHOOKS, wooden
The C. Beck Mfg. Co., Ltd., Penatanguishene, Ont.
BOXES, wooden
G. & J, Esplen, Montreal, Que.
Barchard & Co., Ltd., Toronto.

*For Display Advertisement see Index, Page 37

BOXBOARDS, for making paper boxes
*Canada Boxboard Co., Limited, Montreal, Que.

BRAIDS AND TRIMMINGS
The Moulton Mfg. Co., Limited, Montreal, Que.

BRAKE SHOES
*Canadian Hart Wheels, Limited, Hamilton, Ont.

BRAKE SHOE BACKS
*The John Whitfield Company, Toronto, Ont.

BRANDS, burning
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS BOLTS AND NUTS
*Tallman Brass & Metal Co., Hamilton, Ont.

BRASS AND BRONZE WIRE
*Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.

BRASS, BRONZE and ALUMINUM LETTERS
*Tallman Brass & Metal Co., Hamilton, Ont.

BRASS ENGRAVERS
Pritchard, Andrews Co, of Ottawa, Ltd., Ottawa, Ont.

BRASS FOUNDERS AND FINISHERS
*The Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
*Tallman Brass & Metal Co., Hamilton, Ont.

BRASS GOODS
*The Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
*Mueller Mfg. Co., Sarnia, Ont.
The Garth Co., Montreal, Que.
The James Morrison Brass Mfg. Co., Ltd., Toronto, Ont.
*The Kerr Engine Co., Limited, Walkerville, Ont.
*Tallman Brass & Metal Co., Hamilton, Ont.

BRASS PLATES
Geo. Booth & Son, Toronto.
*Tallman Brass & Metal Co., Hamilton, Ont.

BRASS RODS
*Tallman Brass & Metal Co., Hamilton, Ont.

BRASS RODS, SHEETS AND PLATES
*Brown's Copper and Brass Rolling Mills, Ltd,, New Toronto.

BRASS SHEETS AND PLATES
*Dominion Copper Products Company, Ltd., Montreal, Que.

BRASS SIGNS AND MEMORIALS
*Tallman Brass & Metal Co., Hamilton, Ont.

BRASS TUBING, seamless
Canadian Seamless Wire Co., Ltd., Toronto, Ont.
*Tallman Brass & Metal Co., Hamilton, Ont.
*Dominion Copper Products Company, Ltd., Montreal, Que.

BRASS WIRE
Canadian Seamless Wire Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton, Ont.

BRASS WORK, church
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS WORK, special
Bawden Machine Co., Ltd., Toronto, Ont.
*H. Mueller Mfg. Co., Ltd., Sarnia, Ont.
*Tallman Brass & Metal Co., Hamilton, Ont.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

BRICK
National Brick Co. of Laprairie, Laprairie, Que.
Port Credit Brick Co., Port Credit, Ont.
The Citadel Brick & Paving Block Co., Ltd., Quebec, Que.

BRICK, enamel
National Brick Co. of Laprairie, Laprairie, Que.

BRICK, pressed
National Brick Co. of Laprairie, Laprairie, Que.
The Citadel Brick & Paving Block Co., Ltd., Quebec, Que.

BRICK, rubbing
*Canadian Hart Wheels, Limited, Hamilton, Ont.

BRICK, sewer.
National Brick Co. of Laprairie, Laprairie, Que.

BRIDGES, Railway and Highway
*Hamilton Bridge Works Co., Ltd., Walkerville, Ont.
*The Canadian Bridge Co., Ltd., Hamilton, Ont.
*McGregor & McIntyre, Ltd., Toronto, Ont.
*Dominion Bridge Co., Montreal.
*Mackinnon Steel Co., Ltd., Sherbrooke, Que.
*Manitoba Bridge & Iron Works, Ltd., Winnnpeg, Man,

BROOMS
Simms, T. S., & Co., Limited, St. John, N.B.
Stevens-Hepner Co., Limited, Port Elgin, Ont.

BRONZE SHEETS AND PLATES
*Dominion Copper Products Company, Ltd., Montreal.

BRONZE SHEETS, RODS, PLATES
*Brown's Copper and Brass Rolling Mills, Ltd., New Toronto.

BRONZE TUBING, seamless
*Dominion Copper Products Company, Limited, Montreal,

BRUSHES
Simms, T. S., & Co., Limited, St. John, N.B.
Stevens-Hepner Co., Ltd., Port Elgin, Ont.

BRUSHES, carbon
Canadian National Carbon Co., Ltd., Toronto.

BUCKET TANKS
*MacKinnon Steel Co., Ltd,, Sherbrooke, Que.
*The Bennett & Wright Co., Ltd., Toronto, Ont.

BUCKLES, shoe and coat
Parmenter & Bulloch Co., Limited, Gananoque, Ont.

BUCKLES, harness and trunk
*McKinnon Industries, Ltd., St. Catharines, Ont.

BUILDING BLOCKS, vitrified, salt glazed
Standard Clay Products, Ltd., St. Johns, Que.

BUILDING FELT AND PAPER
*Beveridge Paper Co., Ltd., Montreal and St. John, N.B., Supply Department.
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont,
*The Barrett Co., Ltd., Toronto and Montreal.

BURLAPS
The Canadian Bag Co., Limited, Montreal, Que.
*Scythes & Co., Ltd., Toronto.

BURLAPS, decorative
Dominion Oil Cloth Co., Limited, Montreal, Que.

CABLE ACCESSORIES
*Crouse-Hinds Co., Ltd., Toronto.

CABLES, electric light, power, telephone and telegraph
*Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.

CABLES, transmission and telephones
*Eugene F. Phillips Electrical Works, Ltd., Montreal, Que.

CABLES, transmission and cable
*Northern Electric Co., Ltd., Montreal, Que.

CABLES, wire
The Dominion Wire Rope Co., Ltd., Montreal, Que.
*The B. Greening Wire Co., Ltd., Hamilton, Ont.

CALENDARS, ADVERTISING NOVELTIES, etc.
Lawson & Jones, Ltd., London.

CAMERAS
Canadian Kodak Co., Ltd., Toronto, Ont.

CAMPERS' OUTFITTERS
Slingsby Mfg. Co., Ltd., Brantford, Ont.

CANADA SILVER
*Brown's Copper and Brass Rolling Mills, Ltd., New Toronto.

CANOES
Peterboro Canoe Co., Ltd., Peterboro, Ont.
*Canadian Canoe Co., Ltd., Peterboro, Ont.

CANS, baking powder, etc.
American Can Co., Montreal (Que.) and Hamilton (Ont.).
A. R. Whittall Can. Co., Ltd., Montreal, Que.
*MacDonald Mfg. Co., Ltd., Toronto, Ont.

CANS, fruit
American Can Co., Montreal (Que.) and Hamilton (Ont.).
A. R. Whittall Can. Co., Ltd., Montreal, Que.
*MacDonald Mfg. Co., Ltd., Toronto, Ont.

CANS, iron, lead and putty
A. R. Whittall Can. Co., Ltd., Montreal, Que.

CANS, tin
A. R. Whittall Can Co., Ltd., Montreal, Que.
American Can Co., Montreal (Que.) and Hamilton (Ont.).
*MacDonald Mfg. Co., Ltd., Toronto, Ont.

CANVAS
*Scythes & Co., Ltd., Toronto, Ont.

CAPS, cloth
John W. Peck & Co., Ltd., Montreal, Que.

CAPS FOR HUBS
*McKinnon Industries, Ltd., St. Catharines, Ont.

CARBIDE
*Canada Carbide Co., Ltd., Montreal, Que.
*Union Carbide Co. of Canada, Ltd. Works, Welland, Ont. Head Office, Toronto, Ont.

CARBONS, electric
Canadian National Carbon Co., Ltd., Toronto, Ont.

CARBONS (headlight)
*Crouse-Hinds Co., Ltd., Toronto.

CARBONIC ACID GAS
Canadian Carbonate Co., Montreal.

CARD RECORD SYSTEMS
Lowe-Martin Co., Ltd., Ottawa, Ont.
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

CARPETS AND RUGS
Toronto Carpet Mfg. Co., Limited, Toronto.

CARPETS AND RUGS, Axminster and ingrain
Toronto Carpet Mfg. Co., Ltd.

CARPETS AND RUGS, Brussels and Wilton
Toronto Carpet Mfg. Co., Ltd., Toronto, Ont.

CARPET FELTS, plain and corrugated
*Beveridge Paper Co., Ltd., Montreal and St. John, N.B., Supply Department.

CARPET YARNS, worsted and wool
Toronto Carpet Mfg. Co., Ltd., Toronto, Ont.

CARRIAGE CASTINGS
*McKinnon Industries, Ltd., St. Catharines, Ont.

CARRIAGES, baby, etc.
Canada Furniture Manufacturers. Ltd., Woodstock, Ont.

CARRIERS
*Richards-Wilcox Canadian Co., Ltd., London, Ont.

CARRIERS, box and barrel
*Canadian Mathews Gravity Carrier.

CARRIERS, brick
*Canadian Mathews Gravity Carrier Co., Limited, Toronto.
*Richards-Wilcox Canadian Co., Ltd., London, Ont.

CARS
*Canadian Car & Foundry Co., Ltd., Montreal, Que.
*National Steel Car Co., Ltd., Hamilton, Ont.

CARS, industrial
Hammant Steel Car & Engineering Works, Hamilton, Ont.
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.

CARTONS, lithographed
Harris Lithographing Co., Ltd., Toronto, Ont.

CASTINGS
*Tallman Brass & Metal Co., Hamilton, Ont.

CASTINGS, Alloy
*The Electric Steel & Metals Co., Ltd., Welland, Ont.

CASTINGS, aluminum
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
*Crouse-Hinds Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton, Ont.

CASTINGS, brass
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
*Crouse-Hinds Co., Ltd., Toronto.
*Lauzon Engineering, Ltd., Levis, Que.
*Tallman Brass & Metal Co., Hamilton, Ont.

CASTINGS, brass and bronze
*Tallman Brass & Metal Co., Hamilton, Ont.

CASTINGS, grey iron
*Canadian Rumely Co., Ltd., Toronto, Ont.
*Crouse-Hinds Co., Ltd., Toronto.
*Dodge Mfg. Co., Toronto.
*Canadian Car & Foundry Co., Ltd., Montreal, Que.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.
*Lauzon Engineering, Ltd., Levis, Que.

CASTINGS, malleable iron
*Crouse-Hinds Co., Ltd., Toronto.
*Galt Malleable Iron Co., Ltd., Galt, Ont.

CASTINGS, steel
Beauchemin & Fils, Ltd., Sorel, Que.
*Canadian Steel Founderies, Ltd., Montreal, Que.
*Dominion Steel Foundry Co., Ltd., Hamilton, Ont.
*Electric Steel & Metals Co., Ltd., Welland, Ont.
*Hull Iron & Steel Foundry, Ltd., Hull, P.Q.
*Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

CATALOGUE MAKERS
Grip, Ltd., Toronto, Ont.

CATALOGUE COVERS, by new lithographing process
Harris Lithographing Co., Ltd., Toronto, Ont.

CAUSTIC SODA
Canadian Salt Co., Ltd., Windsor.

CAUSTICS
*Dominion Oil Co., Ltd., Hamilton.

CELLBOARD
Adams Cellboard Co., Toronto.

CEMENT GUNS
Steel & Radiation, Ltd., Toronto.

CEMENTS, High Temp.; plastic, liquid
*Beveridge Paper Co., Ltd., Montreal and St. John, N.B., Supply Department.

CENTRIFUGAL PUMPS
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

CHAINS, for elevators, conveyors and drives
*Canadian Link-Belt Co., Toronto.

CHAINS, sling
*The John Whitfield Co., Toronto.

CHAIRS
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

CHAIRS, assembly hall
Stratford Mfg. Co., Ltd., Stratford, Ont.

CHAIRS, folding
Stratford Mfg. Co., Ltd., Stratford, Ont.

CHAIRS, rattan and upholstered
Imperial Rattan Co., Ltd., Stratford, Ont.

CHAIRS FOR AUTOMOBILES, camp, boat
*McKinnon Industries, Ltd., St. Catharines, Ont.

CHECKS, swing checks, etc.
*Mueller Mfg. Co., Ltd., Sarnia, Ont.

CHEMICALS
Canadian Laboratory Supplies, Ltd., Toronto, Ont.
*Dominion Oil Co., Ltd., Hamilton, Ont.
*The Grasselli Chemical Co., Ltd., Toronto, Ont.
*The Nichols Chemical Co., Ltd., Montreal, Que.

CHEMISTS, industrial
*Milton Hersey Co., Montreal.

CHICLETS AND CHEWING GUM
Canadian Chewing Gum Co., Ltd., Toronto, Ont.

CIRCULAR CUTTERS, solid steel
*Galt Knife Co., Ltd.
The Peter Hay Knife Co., Ltd., Galt, Ont.

CIRCULAR SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.

*For Display Advertisement see Index, Page 37

CLAM SHELL BUCKETS
*M. Beatty & Sons, Ltd., Welland, Ont.
CLOCKS, time
*International Business Machines Co., Ltd., Toronto.
CLOCKS, watchmen's
*The Bennett & Wright Co., Ltd., Toronto, Ont.
CLOSET SEATS
*Goderich Organ Co., Goderich, Ont.
CLOTHING
John W. Peck & Co., Ltd., Montreal, Que.
CLOTHING, leather and sheepskin lined coats
*A. R. Clarke & Co., Ltd., Toronto.
CLOTHING, Mackinaw
The Carss Mackinaw Clothing Co., Ltd., Orillia, Ont.
CLOTHES LINES, cotton
Hamilton Cotton Co., Hamilton, Ont.
CLUTCHES
*Dodge Mfg. Co., Ltd., Toronto.
CLUTCHES, conveyors
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
COAL
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.
Standard Fuel Co., Toronto, Ont.
COAL CUTTERS
*Canadian Ingersoll-Rand Co., Ltd., Montreal.
COBALT OXIDE
*Deloro Smelting & Refining Co., Ltd., Deloro, Ont.
The Coniagas Reduction Co., Ltd., St. Catharines, Ont.
COBALT METAL
*Deloro Smelting & Refining Co., Ltd., Deloro, Ont.
COFFEE
S. H. Ewing & Sons, Montreal.
COLD DRAWN SHAPES, flats, squares and hexagons
*The Canadian Drawn Steel Co., Ltd., Hamilton, Ont.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.
COLD STORAGE DOORS
John Hillock & Co., Ltd., Toronto.
COLLAR BUTTONS
The Arlington Co. of Canada, Ltd., Toronto, Ont.
COLLARS
The Standard Shirt Co., Ltd., Montreal, Que.
COLLARS, coated linen
Parsons & Parsons Canadian Co., Hamilton, Ont.
COLLARS, shaft
Bond Engineering Co., Toronto.
COLORS
Brandram-Henderson, Ltd., Montreal, Que.
A. Ramsay & Son Co., Montreal.
COMBS, fine dressing and name
The Arlington Co. of Canada, Ltd., Toronto, Ont.
COMMERCIAL STATIONERY
*Brown Bros., Ltd., Toronto, Ont.
CONCRETE COATINGS, PAINTS, Etc.
*Trussed Concrete Steel Co. of Canada, Ltd., Walkerville, Ont.
The Imperial Varnish & Color Co., Ltd., Toronto, Ont.
CONCRETE HARDENER AND WATERPROOFER
*Beveridge Paper Co., Ltd., Montreal and St. John, N.B., Supply Department.
CONDUITS FOR INTERIOR WIRING
*Conduits Co., Ltd., Toronto, Ont.
CONDULET BOX FITTINGS
*Crouse-Hinds Co., Ltd., Toronto.
CONDULETS (marine)
*Crouse-Hinds Co., Ltd., Toronto.
CONFECTIONERY
Ganong Bros., Ltd., St. Stephens, N.B.
Moirs, Ltd., Halifax, N.S.
The Montreal Biscuit Co., Montreal, Que.
CONTAINER BOARD—strong container
Bathurst Lumber Co., Ltd., Bathurst, N.B.
CONTRACTOR'S PLANT
*M. Beatty & Sons, Ltd., Welland, Ont.
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
Canadian Ingersoll-Rand Co., Sherbrooke, Que.
CONVEYORS
*Canadian Link-Belt Co., Toronto.
*Canadian Mathews Gravity Carrier Co., Toronto.
*Dodge Mfg. Co., Ltd., Toronto.
COPPER
*Eugene F. Phillips, Electrical Works, Ltd., Montreal, Que.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
*Consolidated Mining & Smelting Co. of Canada, Ltd., Toronto.
COPPER, SHEETS, PLATES, BARS, RODS
*Brown's Copper and Brass Rolling Mills, Ltd., New Toronto, Ont.
COPPER SHEETS AND PLATES
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
*Tallman Brass & Metal Co., Hamilton, Ont.
*Dominion Copper Products Co., Ltd., Montreal, Que.
COPPERSMITHS
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
COPPER TUBING, seamless
*Dominion Copper Products Co., Ltd., Montreal, Que.
Canadian Seamless Wire Co., Ltd., Toronto, Ont.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
COPPER WIRE
Canadian Seamless Wire Co., Ltd., Toronto, Ont.
*Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.
CORKS
S. H. Ewing & Sons, Montreal, Que.
CORK CARPET
Dominion Oil Cloth Co., Ltd., Montreal, Que.
CORRUGATED PAPER BOXES
Adams Cellboard Co., Toronto.
Corrugated Paper Box Co., Ltd., Toronto, Ont.
*Hinde & Dauch Paper Co., Toronto, Ont.
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.
CORUNDUM, artificial
*Coralox, Ltd., Hamilton, Ont.
CORSETS
Dominion Corset Co., Quebec, Que.
COTTONS
*Dominion Textile Co., Ltd., Montreal, Que.
*Montreal Cottons, Ltd., Valleyfield, P.Q.
COTTONADES
Hamilton Cotton Co., Hamilton, Ont.
COUPLERS
*Canadian Steel Foundries, Ltd., Welland, Ont.
COUPLINGS
Bond Engineering Co., Toronto.
*Dodge Mfg. Co., Ltd., Toronto.
CRANES
*Northern Crane Works, Walkerville, Ont.
*The Herbert Morris Crane and Hoist Co., Ltd., Niagara Falls, Ont.
CRANKSHAFTS
Canada Forge Co., Ltd., Welland, Ont.
*The John Whitfield Co., Toronto. Ont.
CREAM CHEESE, Ingersoll
The Ingersoll Packing Co., Ltd., Ingersoll, Ont.
CREAM SEPARATORS AND MILK CLARIFIERS
De Laval Dairy Supply Co., Peterboro, Ont.
The Renfrew Machinery Co., Ltd., Renfrew, Ont.
CREAMERY AND CHEESE FACTORY MACHINERY AND SUPPLIES
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.
CREOSOTED MATERIALS
*The Barrett Co., Ltd., Toronto and Montreal.
CRUCIBLES, plumbago
Dominion Crucible Co., Ltd., Montreal, Que.
CRUSHED STONE
The Hagersville Contracting Co., Ltd., Hagersville, Ont.
CUPOLAS
*Sheldons, Ltd., Galt, Ont.
*Northern Crane Works, Ltd., Walkerville, Ont.
CUPS, presentation
Standard Silver Co., Toronto, Ont.
CURLED HAIR
*Delany & Pettit, Ltd., Toronto.
CURTAINS, chenille
Hamilton Cotton Co., Hamilton, Ont.
CUTLERY
Standard Silver Co., Toronto, Ont.
CUTTERS, machine
*Pratt & Whitney Co., Dundas, Ont.
DASHES, for buggy and carriages
*McKinnon Industries, Ltd., St. Catharines, Ont.
DECALCOMANIA TRANSFERS
Canada Decalcomania Co., Toronto, Ont.
DECK PLUGS, electric marine
*Crouse-Hinds Co., Ltd., Toronto.
DENIMS
Hamilton Cotton Co., Hamilton, Ont.
DERAILS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
DESIGNERS
Ontario Engraving Co., Hamilton Ont.
DESIGNERS AND PRINTERS OF BOOKLETS, Etc.
Grip, Ltd., Toronto, Ont.
DESKS
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.
DESICCATED VEGETABLES
Grahams, Ltd., Belleville, Ont.
DINING ROOM SUITES
The George McLagan Furniture Co., Ltd., Stratford, Ont.
DIES
*Butterfield & Co., Rock Island, P.Q.
*Pratt & Whitney Co., Dundas, Ont.
*John Whitfield Co., Toronto.
DISINFECTING APPARATUS
Spramotor Co., London, Ont.
DOOR HANGERS
*Richards Wilcox Canadian Co., Ltd., London, Ont.
DOUBLETREES
*McKinnon Industries, Ltd., St. Catharines, Ont.
DREDGES
*M. Beatty & Sons, Ltd., Welland, Ont.
DRESSING, belt
Sadler & Haworth, Montreal, Que.
DRESS AND CLOAK TRIMMINGS
J. Henry Peters Co., 1 Mincing St., Toronto, Ont.
DRIFT BOLT DRIVERS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
DRILL PRESSES
*Canada Machinery Corporation, Ltd., Galt, Ont.
DRILL SHARPENERS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
DRILLS
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.
*Pratt & Whitney Co., Dundas, Ont.
DRILLS, pneumatic
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
DRILLS, rock
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
DRIFT BOLTS OR SPIKES
London Rolling Mill Co., Ltd., London, Ont.
DROP FORGINGS.
*Canadian Billings & Spencer, Ltd., Welland, Ont.
*McKinnon Industries, Ltd., St. Catharines, Ont.
DROP HAMMERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
DRUMS, steel, and containers
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.
DRY COLORS
P. D. Dods & Co., Ltd., Montreal.
The Imperial Varnish & Color Co. Ltd., Toronto.
R. C. Jamieson & Co., Ltd., Montreal, Que.
Standard Paint & Varnish Co. Ltd., Windsor, Ont.
DUMB WAITERS
Turnbull Elevator Mfg. Co., Toronto, Ont.
DURABLE WIRE ROPE
The Dominion Wire Rope Co., Ltd., Montreal, Que.
DYNAMITE
Canadian Explosives, Ltd., Montreal, Que.
DYNAMOS
Consolidated Electric Co., Ltd., Toronto, Ont.
*Jones & Moore Electric Co., Ltd., Toronto, Ont.
*The Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.
DYNAMOS, plating
*Jones & Moore Electric Co., Ltd., Toronto, Ont.
EIDERDOWN
Galt Knitting Co., Ltd., Galt, Ont.
ELECTRIC APPLIANCES
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.
*Canadian Westinghouse Co., Ltd., Hamilton, Ont.
ELECTRICAL COMPOUNDS
Standard Paint Co. of Canada, Ltd., Montreal, Que.
ELECTRIC COOKING APPLIANCES
*Canadian General Electric Company, Ltd., Toronto.
ELECTRIC LAMPS
Packard Electric Co., Ltd., Toronto, Ont.
ELECTRIC PLATE WARE
Roden Bros., Ltd., Toronto, Ont.
ELECTRIC BRANDING TOOLS
*The Clemens Electrical Corporation of Canada, Ltd., Hamilton, Ont.
ELECTRIC RAILWAY EQUIPMENT
*Crouse-Hinds Co., Ltd., Toronto.
ELECTRODES, carbon
Canadian National Carbon Co., Ltd., Toronto, Ont.
ELECTROTYPING
Central Press Agency, Ltd., Toronto.
ELECTRICAL SUPPLIES
*Canadian General Electric Company, Ltd., Toronto, Ont.
*Canadian Westinghouse Co., Ltd., Hamilton, Ont.
*Jones & Moore Electric Co., Ltd.,
*Northern Electric Co., Ltd., Montreal, Que.
ELECTRIC SOLDERING IRON
*The Clemens Electrical Corporation of Canada, Ltd., Hamilton, Ont.
ELECTRO-SILVER PLATED WARE
Standard Silver Co., Toronto, Ont.
ELEVATING MACHINERY
*Canadian Link-Belt Co., Toronto.
*Canadian Mathews Gravity Carrier Co., Toronto, Ont.
ELEVATORS
*Jenckes Machine Co., Sherbrooke, Que.
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
Turnbull Elevator Mfg. Co., Toronto, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
*Northern Crane Works, Ltd., Walkerville, Ont.
ELEVATORS FOR ALL PURPOSES
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
ELEVATOR GATES AND DOORS
Turnbull Elevator Mfg. Co., Ltd., Toronto, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.
ELEVATOR GUARDS
*The Geo. B. Meadows, Toronto. Iron & Brass Goods Works Co., Ltd., Toronto, Ont.
*Canada Wire and Iron Goods Co., Hamilton, Ont.
EMERY DRESSERS AND STANDS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
EMERY GRINDERS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
EMERY WHEELS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
EMERY WHEEL GUARDS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

*For Display Advertisement see Index, Page 37

ENAMELS
R. C. Jamieson & Co., Ltd., Montreal, Que.
The Imperial Varnish & Color Co., Ltd., Toronto, Ont.

ENAMEL MANUFACTURERS AND DECORATORS
Standard Paint & Varnish Co., Ltd., Windsor, Ont.

ENAMEL AND TIN WARE
McClary Mfg. Co., London, Ont.

ENGINES
*E. Leonard & Sons, London, Ont.
*Goldie & McCulloch Co., Lt., Galt, Ont.
J. & R. Weir, Montreal, Que.
*Lauzon Engineering, Ltd., Levis, Que.
*Sheldons, Ltd., Galt, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

ENGINES, gas and gasoline
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*Goold - Shapley - Muir Co., Ltd., Brantford, Ont.
*Hamilton Motor Works, Ltd., Hamilton, Ont.
London Gas Power Co., Limited, London, Ont.
*Massey-Harris Co., Ltd., Toronto.

ENGINES, gasoline, tractor, plowing and threshing
*Sawyer-Massey Co., Ltd., Hamilton, Ont.

ENGINES, hoisting
*M. Beatty & Sons, Welland, Ont.
*The Waterous Engine Works Co. Ltd., Brantford, Ont.

ENGINES, marine, gasoline and kerosene
Bruce, Stewart & Co., Ltd., Charlottetown, P.E.I.

ENGINES, steam plowing and threshing
*Sawyer-Massey Co., Ltd., Hamilton, Ont.

ELECTRICAL AND GAS FIXTURES
The Garth Co., Montreal, Que.
The James Morrison Brass Mfg. Co., Ltd., Toronto, Ont.
*Tallman, Brass & Metal Co., Hamilton, Ont.

ELECTRIC HEATING APPLIANCES
*Canadian General Electric Co., Ltd., Toronto, Ont.

ENGRAVERS, photo
Grip, Ltd., Toronto, Ont.
Ontario Engraving Co., Hamilton, Ont.
The Mortimer Co., Ltd., Ottawa.

ENGRAVERS, half-tone
Grip, Ltd., Toronto.
Ontario Engraving Co., Hamilton, Ont.

ENGRAVERS, wood
Ontario Engraving Co., Hamilton, Ont.

ENGRAVERS AND PRINTERS steel plate
American Bank Note Co., Ottawa, Ont.

ENGRAVERS AND PRINTERS bank note
American Bank Note Co., Ottawa, Ont.

ENGRAVING
*J. L. Jones Engraving Co., Toronto, Ont.

ENGRAVING, copper and steel plate
Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

ENSILAGE AND STRAW CUTTERS
J. Fleury's Sons, Aurora, Ont.
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.

EVAPORATED APPLES
Grahams, Ltd., Belleville, Ont.

ENVELOPES
Barber-Ellis Co., Ltd., Toronto.
Canada Envelope Co., Montreal, Que.

EVENERS, for 2, 3, 4, 6 and 8 horses
*McKinnon Industries, Ltd., St. Catharines, Ont.

EXCELSIOR
*Delany & Pettit, Ltd., Toronto.

EXCELSIOR PADS
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

EXPERTS IN PATENT CAUSES
Ridout & Maybee, Toronto, Ont.

EXPLOSIVES, high
Canadian Explosives, Ltd., Montreal, Que.

FACE PLATE JAWS
Ker & Goodwin, Brantford, Ont.

FACTORY SUPPLIES, cheese and creamery
De Laval Dairy Supply Co., Ltd., Montreal, Que.

FANS
*Sheldons, Ltd., Galt, Ont.
*The Canadian Blower & Forge Co., Ltd., Kitchener, Ont.

FASTENERS, belt
*Sadler & Haworth, Montreal, Que.

FELTS, pulp and paper makers
Ayers, Ltd., Lachute Mills, P.Q.
*Beveridge Paper Co., Ltd., Montreal, Que.

FENCES AND GATES
*Dennis Wire & Iron Works Co., London, Ont.
*Canada Wire & Iron Goods Co., Hamilton, Ont.

FENCING AND GATES, woven wire
*Canada Wire and Iron Goods Co., Hamilton, Ont.

FENCING, wire
C. H. Johnson & Sons, Ltd., Montreal, Que.

FENDERS, for buggy and carriages
*McKinnon Industries, Ltd., St. Catharines, Ont.

FIBRE PAILS
*The E. B. Eddy Co., Ltd., Hull, Que.

FIBRE, Vulcanized
*Beveridge Paper Co., Ltd., Montreal and St. John, N.B., Supply Department.

FIBREBRICK, Plastic, jointless
*Beveridge Paper Co., Ltd., Montreal and St. John, N.B., Supply Department.

FILES
Henry Disston & Sons, Ltd., Toronto, Ont.
*The Nicholson File Co., Port Hope.

FILING CABINETS
*Office Specialty Co., Newmarket, Ont.

FILING EQUIPMENT, wood & steel
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

FILING SYSTEMS
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.
Lowe-Martin Co., Ltd., Ottawa, Ont.

FIRE ALARMS
*Northern Electric Co., Ltd., Montreal, Que.

FIRE BRICK
Dominion Fire Brick & Clay Products, Ltd., Moose Jaw, Sask.

FIRE BRICK AND CLAY
Dominion Fire Brick & Clay Products, Ltd., Moose Jaw, Sask.

FIRECLAY
Jas. W. Foley & Co., St. John, N.B.

FIRE DOOR HARDWARE
Richards Wilcox Canadian Co., Ltd., London, Ont.

FIRE DOORS
*A. B. Ormsby Co., Ltd., Toronto.
*The Pedlar People, Ltd., Oshawa, Ont.

FIRE ENGINES
*Waterous Engine Works Co., Ltd., Brantford, Ont.

FIRE ESCAPES
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
*McGregor & McIntyre, Ltd., Toronto, Ont.

FIRE EXTINGUISHERS
*A. B. Ormsby Co., Ltd., Toronto.
*Booth-Coulter Copper & Brass Co., Ltd., Montreal, Que.
*The Bennett & Wright Co., Ltd., Toronto, Ont.

FIRE FIGHTING APPARATUS
*Waterous Engine Works Co., Ltd., Brantford, Ont.

FIRE HOSE
*Canadian Consolidated Rubber Co. of Canada, Ltd., Montreal, Que.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto, Ont.
*Gutta Percha & Rubber, Ltd., Toronto, Ont.

FIRE PREVENTION MATERIAL
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*Eureka Mineral Wool & Asbestos Co., Toronto.
*The Bennett & Wright Co., Ltd., Toronto, Ont.

FIRE PROOF WINDOWS AND DOORS
*A. B. Ormsby Co., Ltd., Toronto.
*Pedlar People, Ltd., Oshawa, Ont.
*Trussed Concrete Steel Co. of Canada, Ltd., Walkerville, Ont.

FIRE SPRINKLER SYSTEMS
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*The Bennett & Wright Co., Ltd., Toronto, Ont.
*Purdy Mansell Co., Toronto, Ont.
*H. G. Vogel Co., Montreal, Que.

FIRE AND WATER DEPARTMENT
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
The Garth Co., Montreal, Que.

FISH, Atlantic Sea-Foods
Maritime Fish Corporation, Ltd., Montreal, Que.

FITTINGS FOR SOIL PIPE
Anthes Foundry, Ltd., Toronto.

FITTINGS, steam
Warden King Ltd., Montreal, Que.

FIXTURES
*Crouse-Hinds Co., Ltd., Toronto.

FLAGS
*Scythes & Co., Ltd., Toronto, Ont.

FLANGES, for wheels
*McKinnon Industries, Ltd., St. Catharines, Ont.

FLOODLIGHTS, electric
*Crouse-Hinds Co., Ltd., Toronto.

FLOORING, hardwood
Seaman Kent Co., Ltd., Meaford, Ont.

FLOUR MILL MACHINERY
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.

FLUE LINERS
Standard Clay Products, Ltd., St. Johns, Que.

FORGES
*Canadian Blower & Forge Co., Ltd., Kitchener, Ont.
*Sheldons, Ltd., Galt, Ont.

FORGINGS
Canada Forge Co., Ltd., Welland, Ont.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
*McKinnon Industries, Ltd., St. Catharines, Ont.
*The John Whitfield Co., Toronto.

FORGINGS, drop
*Canadian Billings & Spencer, Ltd., Welland, Ont.
*Dominion Forge & Stamping Co., Walkerville, Ont.
*McKinnon Industries, Ltd., St. Catharines, Ont.

FOUNDRY EQUIPMENT
*Northern Crane Works, Ltd., Walkerville, Ont.

FOUNTAIN FRUITS AND JUICES
J. J. McLaughlin, Ltd., Toronto.

FOUNTAINS, drinking
*Mueller Mfg. Co., Ltd., Sarnia, Ont.

FRICTION CLUTCH PULLEYS
*Dodge Mfg. Co., Ltd., Toronto.

FROGS AND CROSSINGS, manganese
Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.

FUEL
Standard Fuel Co., Toronto, Ont.

FUR GARMENTS, men's and women's
Holt, Renfrew, Ltd., Quebec.

FUR GOODS
John W. Peck & Co., Ltd., Montreal, Que.

FUR TRIMMINGS, ornaments and buttons
J. Henry Peters Co., 1 Mincing St., Toronto, Ont.

FURNACES
McClary Mfg. Co., London, Ont.
The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

FURNITURE, hall
The George McLagan Furniture Co., Ltd., Stratford, Ont.

FURNITURE, office
The Canadian Office & School Furniture Co., Ltd., Preston, Ont.

FURNITURE, reed and rattan
Imperial Rattan Co., Ltd., Stratford, Ont.

FUSE BOXES
*Crouse-Hinds Co., Ltd., Toronto.

FUSE PLUGS AND FUSES, refillable
*The Clemens Electrical Corporation of Canada, Ltd., Hamilton, Ont.

FUSES
*Economy Fuse & Mfg. Co., Montreal, Que.

GALVANIZED IRON
*A. C. Leslie & Co., Montreal.

GALVANIZED SHEETS
*Dominion Sheet Metal Co., Hamilton, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.

GALVANIZERS
Acme Stamping & Tool Works, Ltd., Hamilton, Ont.
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.
*The Pedlar People, Ltd., Oshawa.
*McKinnon Industries, Ltd., St. Catharines, Ont.

GASOLINE ENGINES
*Ontario Wind & Pump Co., Ltd., Toronto, Ont.
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.
London Gas Power Co., London, Ont.

GASOLINE FIRE ENGINES
*Waterous Engine Works Co., Ltd., Brantford, Ont.

GASOLINE STORAGE SYSTEMS, special underground
S. F. Bowser & Co., Toronto.
*Steel Trough & Machine Co., Ltd., Tweed, Ont.

GASOLINE
*The Imperial Oil Co., Ltd., Toronto, Ont.

GAUGES
*Brown Engineering Corporation, Toronto, Ont.
*John Whitfield Co., Toronto.

GEARS, cut
*Brown Engineering Corporation, Toronto, Ont.
*Hamilton Gear and Machine, Toronto.
*Winnipeg Gear & Engineering Co., Ltd., Winnipeg, Man.
*The John Whitfield Co., Toronto.

GELATINE
Canada Gelatine Co., Ltd., Brantford, Ont.

GENERATORS
*Canadian Crocker - Wheeler Co., Ltd., St. Catharines, Ont.
*Canadian Westinghouse Co., Ltd., Hamilton, Ont.

GENERATORS, electric
*Canadian General Electric Co., Ltd., Toronto.

GILDING METAL
*Dominion Copper Products Co., Ltd., Montreal, Que.

GLASSWARE
Dominion Glass Co., Ltd., Montreal, Que.

GLASSWARE, cut
Roden Bros., Ltd., Toronto.

GLASS FOR BUILDINGS
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.

GLASS BENDERS
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.

GLASS, mirror
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.

GLOVES AND MITTS
*A. R. Clarke & Co., Ltd., Toronto.
Craig, Cowan Co., Ltd., Toronto.

GLUE
Canada Glue Co., Ltd., Brantford, Ont.
*Delany & Pettit, Ltd., Toronto.

GOLD-FILLED WIRE AND PLATE
Canadian Seamless Wire Co., Toronto, Ont.

GOLD AND SILVER REFINERS
Canadian Seamless Wire Co., Toronto, Ont.

GRAIN CRUSHERS, rapid, easy
J. Fleury's Sons, Aurora, Ont.

GRAPE JUICE
J. J. McLaughlin, Ltd., Toronto.
The Welch Co., Ltd., St. Catharines, Ont.

*For Display Advertisement see Index, Page 37

GRATES
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
GRATES, revolving, anticlinker
*Beveridge Paper Co., Ltd., Montreal and St. John, N.B., Supply Department.
GRAVITY CARRIERS
*Canadian Mathews Gravity Carrier Co., Toronto, Ont.
GREASES
*Dominion Oil Co., Ltd., Hamilton, Ont.
GRILLES, metal
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
GRINDER, bench
Bond Engineering Co., Toronto.
GRINDERS, portable
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
GRINDERS, pedestal and bench
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
GRINDING AND POLISHING MACHINERY
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
GRINDING WHEELS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
*The Dominion Abrasive Wheel Co., Ltd., New Toronto, Ont.
GRINDSTONES
*Richards - Wilcox Canadian Co., Ltd., London, Ont.
GUARDS, condulet
*Crouse-Hinds Co., Ltd., Toronto.
GUNN SECTIONAL BOOKCASES
The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.
GUY ANCHORS
B. J. Coghlin Co., Ltd., Montreal.
GUL RODS
*Crouse-Hinds Co., Ltd., Toronto.
GYPSUM, crushed
*Albert Mfg. Co., Hillsborough, N.B.
GYPSUM PRODUCTS
*Manitoba Gypsum Co., Ltd., Winnipeg, Man.
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.
HACK SAW BLADES AND FRAMES
*E. C. Atkins & Co., Inc., Hamilton, Ont.
HACK SAW MACHINES
*E. C. Atkins & Co., Inc., Hamilton, Ont.
HALL FURNITURE
The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.
HAMS
F. W. Fearman Co., Ltd., Hamilton, Ont.
HAMES, steel and iron
*McKinnon Industries, Ltd., St. Catharines, Ont.
HANDLES (axe, pick, sledge hammers, etc.)
The Lachute Shuttle Co., Ltd., Lachute Mills, P.Q.
HANDLES, wood
Canada Spool & Bobbin Co., Ltd., Walkerton, Ont.
*Toy products, Ltd., Farm Point, Que.
HAND SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.
HANGERS
Bond Engineering Co., Toronto.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
HARDWARE
*Richards - Wilcox Canadian Co., Ltd., London, Ont.
Taylor-Forbes Co., Ltd., Guelph, Ont.
The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.
HARNESS
Lamontagne, Ltd., Montreal, Que.
HATS, men's straw
The Crown Hat Co., Ltd., Galt, Ont.
HARNESS HARDWARE
*McKinnon Industries, Ltd., St. Catharines, Ont.
HATS, ladies' and children's straw
The Crown Hat Co., Ltd., Galt, Ont.
HATS, ladies' and children's felt and beaver
The Crown Hat Co., Ltd., Galt, Ont.
HATS, ladies' felt and straw
Toronto Hat Mfg. Co., Toronto.
HAULAGE, wire rope
The Dominion Wire Rope Co., Ltd., Montreal, Que.
HEADING SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.
HEADLIGHT, electric
*Crouse-Hinds Co., Ltd., Toronto.
HEATERS
*Waterous Engine Works Co., Ltd., Brantford, Ont.
HEATERS, feed water
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
HEATING APPLIANCES
*C. A. Dunham Co., Ltd., Toronto.
*Sheldons, Ltd., Galt, Ont.
*The Canadian Blower & Forge Co., Ltd., Kitchener, Ont.
HEATING SYSTEMS
*C. A. Dunham Co., Ltd., Toronto.
HEMLOCK, union and oak sole
Breithaupt Leather Co., Ltd., Kitchener, Ont.
HESSIANS
The Canadian Bag Co., Ltd., Montreal, Que.
*Scythes & Co., Ltd., Toronto.
HINGES
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
HOISTS
*M. Beatty & Sons, Ltd., Welland, Ont.
*Northern Crane Works, Ltd., Walkerville, Ont.
HOISTS, electric and pneumatic
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
*M. Beatty & Sons, Ltd., Welland, Ont.
*Northern Crane Works, Ltd., Walkerville, Ont.
HOISTING MACHINERY
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
*M. Beatty & Sons, Ltd., Welland, Ont.
*Northern Crane Works, Ltd., Walkerville, Ont.
HOOKS, for logging chains
*McKinnon Industries, Ltd., St. Catharines, Ont.
HOSE, fire
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Dunlop Tire & Rubber Goods Co., Ltd., Toronto, Ont.
*Gutta Percha & Rubber, Ltd., Toronto, Ont.
HOSE, rubber
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Gutta Percha & Rubber, Ltd.
HUB CAPS
*McKinnon Industries, Ltd., St. Catharines, Ont.
HUBS, for Ford cars
*McKinnon Industries, Ltd., St. Catharines, Ont.
HYDRAULIC PRESSES
*Bawden Machine Co., Ltd., Toronto, Ont.
*William R. Perrin, Ltd., Toronto
HYDRO-ELECTRIC PLANTS
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
ICE CREEPERS
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.
ICE-MAKING MACHINERY
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.
INCUBATORS AND BROODERS
Lee Mfg. Co., Ltd., Pembroke, Ont.
INGOT METALS
*Brown's Copper & Brass Rolling Mills, Ltd., New Toronto, Ont.
INSERTED TOOTH SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.
INSULATING COMPOUNDS
The Imperial Varnish & Color Co., Ltd., Toronto.
INSULATING PAPERS
*Beveridge Paper Co., Ltd., Montreal and St. John, N.B., Supply Department.
INSULATORS
*Crouse-Hinds Co., Ltd., Toronto.
INTERLOCKING RUBBER TILING
*Gutta Percha & Rubber Mfg. Co., of Toronto, Ltd., Toronto, Ont
INVERTS
Standard Clay Products, Ltd., St Johns, Que.
IRON
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.
IRON, refined bar
Starr Mfg. Co., Ltd., Dartmouth, N.S.
IRON AND STEEL BARS
*Burlington Steel Co., Ltd., Hamilton, Ont.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
IRON STAIRWAYS
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
*McGregor & McIntyre, Ltd., Toronto, Ont.
IRONWORK, architectural
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
*Canada Wire & Iron Goods Co., Hamilton, Ont.
IRONWORK, ornamental
*Canada Wire & Iron Goods Co., Hamilton, Ont.
IRON, LEAD AND PUTTY
A. R. Whittall, Montreal, Que.
IRON PUMPS
*Medicine Hat Pump and Brass Mfg. Co., Medicine Hat, Alta.
JACKS
*Globe Engineering Co., Ltd., Hamilton, Ont.
JAM, canned goods, etc.
E. D. Smith & Son, Ltd.
JAPANS, enamels, etc.
A. Muirhead Co., Ltd., Toronto.
The Imperial Varnish & Color Co., Ltd., Toronto, Ont.
JIGS AND TOOLS
*Brown Engineering Corporation, Toronto, Ont.
JOINTERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
JELLY POWDER
S. H. Ewing & Sons, Montreal.
JEWELRY, enamelled souvenir
Caron Bros., Montreal, Que.
JEWELRY, gold-filled
Caron Bros., Montreal, Que.
JOIST HANGERS
*Richards - Wilcox Canadian Co., Ltd., London, Ont.
JUNCTION BOXES, cable
*Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.
KELSEY WARM AIR GENERATOR
The Jas. Smart Mfg. Co., Limited, Brockville, Ont.
KEROSENE ENGINES
London Gas Power Co., Limited, London, Ont.
KILNS
*Sheldons, Ltd., Galt, Ont.
KINDLING
Standard Fuel Co., Toronto, Ont.
KNIFE GRINDERS
*Canada Machinery Corporation Ltd., Galt, Ont.
*W. H. Banfield & Sons, Toronto.
KNITTED GOODS
*Penman's, Ltd., Paris, Ont.
KNIVES
*Galt Knife Co., Ltd.
*The Peter Hay Knife Co., Ltd., Galt, Ont.
Simonds Canada Saw Co., Ltd., Montreal, Que.
KNIVES, pulp and paper
Henry Disston & Sons, Toronto.
*The Peter Hay Knife Co., Ltd., Galt, Ont.
KODAKS AND PHOTOGRAPHIC SUPPLIES
Canadian Kodak Co., Ltd., Toronto.
LABELS
Lawson & Jones, Ltd., London, Ont.
LABELS, lithographed
Harris Lithographing Co., Ltd., Toronto, Ont.
LABORATORY SUPPLIES
Canadian Laboratory Supplies, Ltd., Toronto.
LACE LEATHER
F. C. McCordick, St. Catharines, Ont.
*Sadler & Haworth, Montreal, Que.
*The D. K. McLaren Belting Co., Ltd., Montreal, Que.
*The J. C. McLaren Belting Co., Ltd., Montreal, Que.
LADDERS
Stratford Mfg. Co., Ltd., Stratford,, Ont.
LADDERS, step
*Otterville Mfg. Co., Ltd., Otterville, Ont.
LADLES, foundry
*Northern Crane Works, Ltd., Walkerville, Ont.
LAMP GLOBES
*Crouse-Hinds Co., Ltd., Toronto.
LARD
F. W. Fearman Co., Ltd., Hamilton, Ont.
LATH
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.
LATHE CHUCKS
Ker & Goodwin, Brantford, Ont.
LATHE-DOGS
Canadian Billings & Spencer, Ltd., Welland, Ont.
LATHES
*Canada Machinery Corporation, Ltd., Galt, Ont.
LAUNCHES
Peterboro Canoe Co., Ltd., Peterboro, Ont.
LAWN MOWERS
Taylor-Forbes Co., Ltd., Guelph, Ont.
LAWN SWINGS
Stratford Mfg. Co., Ltd., Stratford, Ont.
LAVATORIES, enameled
Amherst Foundry Co., Ltd., Amherst, N.S.
LAUNDRY SINKS
Amherst Foundry Co., Ltd., Amherst, N.S.
LEAD
*Consolidated Mining & Smelting Co. of Canada, Ltd., Toronto.
LEAD GRINDERS
Benjamin Moore & Co., Ltd., Toronto, Ont.
LEAD PIPE
*Hoyt Metal Co., Toronto, Ont.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
*The Canada Metal Co., Toronto.
LEAD SHEET
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
LEATHER
The Robson Leather Co., Ltd., Oshawa, Ont.
LEATHER, bookbinders'
Clarke & Clarke, Ltd., Toronto.
LEATHER DASHES & FENDERS
*McKinnon Industries, Ltd., St. Catharines, Ont.
LEATHER, fancy
Clarke & Clarke, Ltd., Toronto.
LEATHER GOODS
Lamontagne, Ltd., Montreal, Que.
LEATHER, hemlock, union and oak sole
The Breithaupt Leather Co., Ltd., Kitchener, Ont.
LEATHER, patent colt and side leather
*A. R. Clarke & Co., Ltd., Toronto.
LEATHER, sheep skin, etc.
Clarke & Clarke, Ltd., Toronto.
LEATHER, upholstering
Clarke & Clarke, Ltd., Toronto.
LEATHER, upper
A. Davis & Son., Ltd., Kingston, Ont.
King Brothers Co., Ltd., Whitby, Ont.
LIGHTS, marine, side and port
*Crouse-Hinds Co., Ltd., Toronto.
LINK BELT, Ewart, and sawmill riveted
*Canadian Link-Belt Co., Toronto.

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LINK BELTING
*The Dodge Mfg. Co., Ltd., Toronto, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

LINOLEUM
Dominion Oil Cloth Co., Ltd., Montreal, Que.

LITHOGRAPHED BUSINESS STATIONERY
Business Systems, Ltd., Toronto.

LITHOGRAPHERS
American Bank Note Co., Ottawa, Ont.
Harris Lithographing Co., Ltd., Toronto, Ont.
The Mortimer Co., Ltd., Ottawa, Ont.

LOCKERS
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
*Geo. B. Meadows, Wire, Iron and Brass Works Co., Toronto. Ont.

LOCOMOTIVE BLOCKS
Standard Clay Products, Ltd., St. Johns, Que.

LOCOMOTIVES, industrial
*Montreal Locomotive Works, Ltd., Montreal, Que.

LOCOMOTIVE & MARINE BRASS WORKS
The James Morrison Brass Mfg. Co., Ltd., Toronto.

LOGGING CHAIN HOOKS
*McKinnon Industries, Ltd., St. Catharines, Ont.

LOOSE LEAF BINDERS AND FORMS
Business Systems, Ltd., Toronto.

LOOSE LEAF SYSTEMS
Copeland-Chatterson Co., Ltd., Brampton, Ont.
Lowe-Martin Co., Ottawa, Ont.

LOOSE LEAF SUPPLIES
The Esdale Press, Ltd., Edmonton, Alta.

LUBRICATORS, steam sight feed
Penberthy Injector Co., Ltd., Windsor, Ont.

LUGS, for silos and water tanks
*Ontario Wind Engine & Pump Co., Ltd., Toronto.
*Otterville Mfg. Co., Ltd., Otterville, Ont.
*McKinnon Industries, Ltd., St. Catharines, Ont.

LUMBER
*Brown Corporation, La Tuque, Que.
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.
G. & J. Esplen, Montreal, Que.

LUMBER, asbestos
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

LUMBER, spruce and pine, cedar railway ties and shingles
Bathurst Lumber Co., Ltd., Bathurst, N.B.

LUMBERING BLANKETS
Slingsby Mfg. Co., Ltd., Brantford, Ont.

LUMBER, red pine and spruce
Gillies Bros., Ltd., Braeside, Ont.

LUMBER, spruce, fir, larch and cedar
Fernie Lumber Co., Ltd., Fernie, B.C.

LUMBER, White pine
Gillies Bros., Ltd., Braeside, Ont.

MACHINE KNIVES
*Galt Knife Co., Ltd.
*E. C. Atkins & Co., Inc., Hamilton, Ont.
Henry Disston & Sons, Toronto.

MACHINE TOOLS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINE WORK, special and repairs
*Canadian Rumely Co., Ltd., Toronto, Ont.
*The John Whitfield Co., Toronto.

MACHINERY AND UTENSILS FOR BAKERS
Fletcher Mfg. Co., Ltd., Toronto.

MACHINERY AND UTENSILS FOR CANDY
Fletcher Mfg. Co., Ltd., Toronto.

MACHINERY AND UTENSILS FOR ICE CREAM
Fletcher Mfg. Co., Ltd., Toronto.

MACHINERY, conveying
*Canadian Link-Belt Co., Toronto.
*Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

MACHINERY, flour mill
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

MACHINERY, grinding
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
J. & R. Weir, Montreal, Que.
*M. Beatty & Sons, Ltd., Welland.
*Northern Crane Works, Ltd., Walkerville, Ont.

MACHINERY, ice cream
J. J. McLaughlin, Ltd., Toronto.

MACHINERY, iron working
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, pulp mill
Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

MACHINERY, punching and shearing
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, railroad and car-shop
*Canada Machinery Corporation, Ltd., Galt, Ont.
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, roadmaking
Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
Sawyer-Massey Co., Ltd., Hamilton, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

MACHINERY, sawmill
The E. Long Mfg. Co., Ltd., Orillia, Ont.
P. Payette & Co., Pentanguishene, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
*Yates, P. B., Machine Co., Ltd., Hamilton, Ont.

MACHINERY, sheet metal working
Brown, Boggs Co., Ltd., Hamilton, Ont.
*Canada Machinery Corporation, Ltd., Galt, Ont.

MACHINERY, special
Bawdon Machine Co., Ltd., Toronto.
*The John Whitfield Co., Toronto, Ont.

MACHINERY, transmission
Bond Engineering Co., Toronto.
*Dodge Mfg. Co., Ltd., Toronto.
*Goldie & McCulloch Co., Ltd., Galt, Ont.

MACHINERY, woodworking
*Canada Machinery Corporation, Ltd., Galt, Ont.
*Yates, P. B., Machine Co., Ltd., Hamilton, Ont.
Preston Woodworking Machinery Co., Ltd., Preston, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

MACHINE WORK, special and repairs
*Canadian Rumely Co., Ltd., Toronto, Ont.
*John Whitfield Co., Toronto, Ont.

MACHINE WRENCHES
*Canadian Billings & Spencer, Ltd., Welland, Ont.

MACHINES, painting
Spramotor Co., London, Ont.

MAGNESITE
Canadian Carbonate Co., Montreal, Que.

MALLEABLE, for carriages
*McKinnon Industries, Ltd., St. Catharines, Ont.

MALLEABLE IRON CASTINGS
*McKinnon Industries, Ltd., St. Catharines, Ont.
Galt Malleable Iron Co., Ltd., Galt, Ont.

MALT
*Hiram Walker & Sons, Ltd., Walkerville, Ont.

MAPLE PRODUCTS
*Maples, Ltd., Toronto, Ont.

MARTINGALE RINGS AND SLIDE LOOPS
The Arlington Co. of Canada, Ltd., Toronto, Ont.

MATCHERS
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.

MATCHES
*The E. B. Eddy Co., Ltd., Hull, Que.

MECHANICAL STOKERS
*The Jones Underfeed Stoker Co., Ltd., Toronto.

MEDICINES, patented and pharmaceutical
Dr. Ed. Morin & Cie., Ltd., Quebec.

METAL, babbitt
*Canada Metal Co., Toronto, Ont.
*Tallman Brass & Metal Co., Hamilton, Ont.
Alonzo W. Spooner, Ltd., Port Hope, Ont.

METAL CEILINGS
*The Pedlar People, Ltd., Oshawa, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.

METAL LATH
*Trussed Concrete Steel Co. of Canada, Ltd., Walkerville, Ont.
*The Pedlar People, Ltd., Oshawa, Ont.

METAL PACKING
*Garlock Packing Co., Hamilton, Ont.

METAL, spinning and stamping
The Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.

METAL SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.

METAL SHINGLES
*The Pedlar People, Ltd., Oshawa, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.

METAL STAMPINGS
Canadian Cartridge Co., Ltd., Hamilton, Ont.

METERS, water
Canadian Cartridge Co., Ltd., Hamilton, Ont.

MILK DEALERS' MACHINERY AND SUPPLIES
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

MILLBOARD, asbestos
*Eureka Mineral Wool & Asbestos Co., Toronto.

MILLING CUTTERS
Pratt & Whitney Co. of Canada, Dundas, Ont.

MINING MACHINERY
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.

MITTS AND GLOVES, Indian, tan, red deerskins
Holt, Renfrew. Ltd., Quebec, Que.
A. R. Clarke & Co., Ltd., Toronto.

MIXERS, chocolate, dough and paint
Fletcher Mfg. Co., Ltd., Toronto.

MOCCASINS AND SLIPPERS, Indian tanned leathers
Holt, Renfrew, Ltd., Quebec, Que.

MORTISERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.

MOTOR CARS
*Ford Co. of Canada, Ford, Ont.

MOTORS, electric
*Canadian General Electric Co., Ltd., Toronto, Ont.

MOTORS, electric (alternating current)
*Canadian Westinghouse Co., Ltd., Hamilton, Ont.
Consolidated Electric Co., Ltd., Toronto, Ont.
*Jones & Moore Electric Co., Ltd., Toronto, Ont.
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.
*T. & H. Electric Co., Hamilton, Ont.

MOTORS, electric (direct current)
*Canadian Westinghouse Co., Ltd., Hamilton, Ont.
Consolidated Electric Co., Ltd., Toronto, Ont.
*Jones & Moore Electric Co., Ltd., Toronto, Ont.
*T. & H. Electric Co., Hamilton.

MOTORS, electric (repairing)
Consolidated Electric Co., Ltd., Toronto, Ont.
*T. & H. Electric Co., Hamilton.

MOTORS, pneumatic
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

MOULDERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.

NAILS
*The Steel Co. of Canada, Ltd., Hamilton, Ont.

NAILS, copper
Parmenter & Bullock Co., Ltd., Gananoque, Ont.

NAILS, wire
Parmenter & Bullock Co., Ltd., Gananoque, Ont.
The Graham Nail Works, Toronto.

NAPHTHA
*The Imperial Oil Co., Ltd., Toronto, Ont.

NECK YOKES
*McKinnon Industries, Ltd., St. Catharines, Ont.

NICKEL OXIDE
*Deloro Smelting & Refining Co., Ltd., Deloro, Ont.
Coniagas Reduction Co., Ltd., St. Catharines, Ont.

NICKEL METAL
*Deloro Smelting & Refining Co., Ltd., Deloro, Ont.

NIPPLES, for radiators
*McKinnon Industries, Ltd., St. Catharines, Ont.

NUTS
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.
*The National Acme Mfg. Co., Montreal, Que.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
*United Brass & Lead, Ltd., Toronto, Ont.

OAKUM, plumbers, Canadian Navy
Factory Waste & Metal Co., Montreal, Que.
*Scythes & Co., Ltd., Toronto, Ont.

OARLOCKS
*McKinnon Industries, Ltd., St. Catharines, Ont.

OAT CRUSHERS AND FLAKERS
J. Fleury's Sons, Aurora, Ont.

OFFICE DESKS
*Goderich Organ Co., Goderich, Ont.

OFFICE EQUIPMENT
Lowe-Martin Co., Ltd., Ottawa, Ont.
*Office Specialty Co., Newmarket, Ont.

OFFICE FURNITURE
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

OILS
Brandram-Henderson, Ltd., Montreal, Que.
A. Ramsay & Son Co., Montreal, Que.
Sherwin-Williams Co. of Canada, Ltd., Montreal, Que.

OIL FILTRATION AND CIRCULATING SYSTEMS
S. F. Bowser & Co., Toronto, Ont

OIL STORAGE SYSTEMS, self-measuring
S. F. Bowser & Co., Toronto.

OIL COMPANIES
*Canadian Oil Cos., Toronto.
Commercial Oil Co., Ltd., Hamilton, Ont.
*Imperial Oil Co., Toronto.

OILS (petroleum products)
*British American Oil Co., Ltd., Toronto, Ont.
*Dominion Oil Co., Ltd., Hamilton, Ont.
*The Imperial Oil Co., Toronto.

*For Display Advertisement see Index, Page 37

OILS, road
*The Barrett Co., Ltd., Toronto and Montreal.
OIL HOLE COVERS
*Canadian Winkley Co., Ltd., Windsor, Ont.
OIL CUPS, both screw top and hinge lid
*Canadian Winkley Co., Ltd., Windsor, Ont.
OILCLOTHS, floor and table
Dominion Oil Cloth Co., Ltd., Montreal, Que.
ORGANS
*Goderich Organ Co., Goderich, Ont.
Karn-Morris Piano & Organ Co., Ltd., Woodstock, Ont.
ORGANS, pipe
Casavant Freres, St. Hyacinthe, Que.
Karn-Morris Piano & Organ Co., Ltd., Woodstock, Ont.
ORGANS, parlor
*Goderich Organ Co., Goderich, Ont.
ORNAMENTAL IRON WORK
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
*The Geo. B. Meadows, Toronto Iron & Brass Goods Works Co., Ltd., Toronto, Ont.
*McGregor & McIntyre, Ltd., Toronto, Ont.
OVERALLS
Peerless Overall Co., Rock Island, Que.
Walker Pant & Shirt Co., Walkerville and Chatham, Ont.
The Standard Shirt Co., Ltd., Montreal, Que.
OVERCOATINGS
Rosamond Woollen Co., Almonte, Ont.
OVERHEAD RUNWAYS
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
*Richards-Wilcox Canadian Co., Ltd., London, Ont.
OXY-ACETYLENE WELDING
*L'Air Liquide Society, Montreal, Que.
*The Prest-O-Lite Co., Inc., Toronto.
OXYGEN
*L'Air Liquide Society, Montreal, Que.
PACKING BOXES
Barchard & Co., Ltd., Toronto.
PACKING, engine
Dunlop Tire & Rubber Goods Co., Ltd., Toronto, Ont.
*Garlock Packing Co., Hamilton, Ont.
PACKING, rubber
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto, Ont.
*Gutta Percha & Rubber Mfg. Co. of Toronto, Ltd.
Jenkins Bros., Ltd., Montreal, Que.
PAILS AND TUBS, wooden
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.
PAINTERS' SUPPLIES
A. Muirhead Co., Ltd., Toronto.
PAINTS
R. C. Jamieson & Co., Ltd., Montreal, Que.
PAINTS AND VARNISHES
A. Muirhead Co., Ltd., Toronto.
Benjamin Moore & Co., Ltd., Toronto, Ont.
Standard Paint & Varnish Co., Ltd., Windsor, Ont.
The Imperial Varnish & Color Co., Ltd., Toronto, Ont.
The Staneland Co., Ltd., Victoria, B.C.
A. Ramsay & Sons Co., Montreal, Que.
Standard Paint Co. of Canada, Ltd., Montreal, Que.
PAINTS, barn and bridge
Standard Paint & Varnish Co., Ltd., Windsor, Ont.
PAINTS, preservative
*Beveridge Paper Co., Ltd., Montreal and St. John, N.B., Supply Department.
Standard Paint Co. of Canada, Ltd., Montreal, Que.
*The Barrett Co., Ltd., Toronto and Montreal.

PANELBOARDS
*Crouse-Hinds Co., Ltd., Toronto.
PAPER, bags, all kinds
*Beveridge Paper Co., Ltd., Montreal and St. John, N.B., Supply Department.
PAPER, book
Barber Paper & Coating Mills, Ltd., Georgetown, Ont.
PAPER BOXES
King Paper Box Co., Ltd., Montreal, Que.
*Rudd Paper Box Co., Ltd., Toronto, Ont.
PAPER, coated, book and label
*Provincial Paper Mills, Ltd., Georgetown, Ont.
PAPER, coated box board
*Provincial Paper Mills, Ltd., Georgetown, Ont.
PAPER, coated cover
*Provincial Paper Mills, Ltd., Georgetown, Ont.
PAPER, envelope
*Provincial Paper Mills, Ltd., Georgetown, Ont.
The Toronto Paper Mfg. Co., Cornwall, Ont.
PAPER, enamelled blotting
*Provincial Paper Mills, Ltd., Georgetown, Ont.
PAPER, label
*Provincial Paper Mills, Ltd., Georgetown, Ont.
PAPER, ledger
*Howard Smith Paper Mills, Ltd., Montreal, Que.
*Rolland Paper Co., Ltd., Montreal, Que.
The Toronto Paper Mfg. Co., Cornwall, Ont.
PAPERBOARDS
*Canada Boxboard Co., Ltd., Montreal, Que.
PAPER, super-book
The Toronto Paper Mfg. Co., Cornwall, Ont.
PAPER, wall
Stauntons, Ltd., Toronto.
PAPER, waxed
Business Systems, Ltd., Toronto.
PAPER, writing
The Toronto Paper Mfg. Co., Cornwall, Ont.
Howard Smith Paper Mills, Ltd., Montreal, Que.
*Rolland Paper Co., Ltd., Montreal, Que.
PAPERS, bond
*Howard Smith Paper Mills, Ltd., Montreal, Que.
*Rolland Paper Co., Ltd., Montreal, Que.
PAPERS, building
Bathurst Lumber Co., Ltd., Bathurst, N.B.
*The Riordon Pulp & Paper Co., Montreal, Que.
Standard Paint Co. of Canada, Ltd., Montreal, Que.
PARCHMENT PAPER, for wet packing
*Beveridge Paper Co., Ltd., Montreal and St. John, N.B., Supply Department.
PARK SEATS
Stratford Mfg. Co., Ltd., Stratford, Ont.
PARLOR SUNDRIES
The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.
PATENTS
Fetherstonhaugh & Co., Toronto.
Ridout & Maybee, Toronto, Ont.
*Harold C. Shipman & Co., Ottawa.
PATENT LITIGATION
Ridout & Maybee, Toronto, Ont.
*Harold C. Shipman & Co., Ottawa, Ont.
PATTERN MAKERS' BRASS DOWEL PINS
*Canadian Winkley Co., Ltd., Windsor, Ont.
PAY ROLL AUDITS
*International Business Machines, Ltd., Toronto, Ont.
PERFORATED METALS
*Canada Wire & Iron Goods Co., Hamilton, Ont.
PERFORATED MUSIC ROLLS
The Otto Higel Co., Ltd., Toronto.
PERFUMES AND TOILET PREPARATIONS
Sovereign Perfumes, Ltd., Toronto.

PETROLEUM PRODUCTS
*The Imperial Oil Co., Ltd., Toronto, Ont.
PHOTO MAILERS
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.
PIANOS
Dominion Organ & Piano Co., Ltd., Bowmanville, Ont.
*Gourlay, Winter & Leeming, Toronto, Ont.
Karn-Morris Piano & Organ Co., Ltd., Woodstock, Ont.
PIANO ACTIONS
The Otto Higel Co., Ltd., Toronto.
PIANO KEYS
The Otto Higel Co., Ltd., Toronto.
PIANOS, player
*Gourlay, Winter & Leeming, Toronto, Ont.
Karn-Morris Piano & Organ Co., Ltd., Woodstock, Ont.
PIANO, player actions
The Otto Higel Co., Ltd., Toronto.
PIANO STOOLS AND BENCHES
*Goderich Organ Co., Goderich, Ont.
PIG IRON
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
M. A. Hanna & Co., Toronto.
PINS, society, emblems and badges
Caron Bros., Montreal, Que.
PIPE, cast iron, for water and gas
National Iron Works, Ltd., Toronto, Ont.
PIPE COUPLINGS
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
PIPE COVERINGS
*Eureka Mineral Wood & Asbestos Co., Toronto, Ont.
PIPE ORGANS
Karn-Morris Piano & Organ Co., Ltd., Woodstock, Ont.
PIPES, culvert
Standard Clay Products, Ltd., St. John's, Que.
*The Pedlar People, Ltd., Oshawa, Ont.
PIPE AND NIPPLES, black and galvanized
*Canadian Tube & Iron Co., Ltd., Montreal, Que.
PIPE, sewer
Hamilton & Toronto Sewer Pipe Co., Ltd., Hamilton, Ont.
Standard Clay Products, Ltd., St. John's, Que.
PIPE, soil and fittings
Anthes Foundry, Ltd., Toronto and Winnipeg.
Warden King Ltd., Montreal, Que.
PIPE AND TUBES, wrought
*Page-Hersey Iron Tube & Lead Co., Ltd., Toronto, Ont.
PISTON RODS
*The Canadian Drawn Steel Co., Ltd., Hamilton, Ont.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.
PLANERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
PLANING MILLS
G. & J. Esplen, Montreal, Que.
PLASTERING TROWELS
*E. C. Atkins & Co., Inc., Hamilton, Ont.
PLOWS
J. Fleury's Sons, Aurora, Ont.
PLUGS
*Crouse-Hinds Co., Ltd., Toronto.
PLUMBAGO CRUCIBLES AND STOPPER HEADS
Dominion Crucible Co., Ltd., Montreal, Que.
PLUMBERS' SUPPLIES
The Garth Co., Montreal, Que.
The James Morrison Brass Mfg. Co., Ltd., Toronto, Ont.
PLUMBING APPLIANCES
Standard Sanitary Mfg. Co., Ltd., Toronto, Ont.
PLUMBING SUPPLIES
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
PNEUMATIC DRILLS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
PNEUMATIC MACHINERY
*Canadian Ingersoll-Rand Co., Sherbrooke, P.Q.

POLE LINE MATERIAL (wooden insulator top pins, side blocks, pole steps, cross arms)
The Lachute Shuttle Co., Ltd., Lachute Mills, P.Q.
POLES, flag
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.
POLES, telegraph and telephone, cedar
Fernie Lumber Co., Ltd., Fernie, B.C.
PORK PACKERS AND CHEESE EXPORTERS
The Ingersoll Packing Co., Ltd., Ingersoll, Ont.
POSTS, split cedar fence
Fernie Lumber Co., Ltd., Fernie, B.C.
POULTRY SUPPLIES AND MEDICINES
Lee Mfg. Co., Ltd., Pembroke, Ont.
POWDER, blasting
Canadian Explosives, Ltd., Montreal, Que.
POWER PRESSES
Hydraulic Machinery Co., Ltd., Montreal, Que.
*William R. Perrin, Ltd., Toronto.
PRESERVATIVE PAINT
*Trussed Concrete Steel Co. of Canada, Ltd., Walkerville, Ont.
PRESSES, baling and filter
*William R. Perrin, Ltd., Toronto.
PRESSES, hydraulic
*The Hydraulic Machinery Co., Limited, Montreal.
PRESSES, sheet metal stamping
Brown, Boggs Co., Ltd., Hamilton, Ont.
*Canada Machinery Corporation, Ltd., Galt, Ont.
PRESSES, veneer
*Canada Machinery Corporation, Ltd., Galt, Ont.
PRESSED STEEL AND BRASS GREASE CUPS
*William R. Perrin, Ltd., Toronto.
PRINTERS
Rous & Mann, Ltd., Toronto, Ont.
The Mortimer Co., Ltd., Ottawa, Ont.
PRINTING AND LITHOGRAPHING
Lawson & Jones, Ltd., London, Ont.
PULLEYS
Bond Engineering Co., Toronto.
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
PULLEYS, wood split
*Bernard Industrial Co., Fortierville, P.Q.
PULP, bleached sulphite
The Edward Partington Pulp & Paper Co., St. John, N.B.
Riordan Sales Co., Ltd., Montreal, Que.
PULP, unbleached sulphite
Riordan Sales Co., Ltd., Montreal,
PULP, sulphate and sulphite
Bathurst Lumber Co., Ltd., Bathurst, N.B.
PULP
*Brown Corporation, La Tuque, Que.
PULP AND PAPER MILL MACHINERY
*The Hydraulic Machinery Co., Limited, Montreal.
PUMPS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
*Bawden Machine Co., Ltd., Toronto, Ont.
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*E. Leonard & Sons, Ltd., London, Ont.
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.
Spramotor Co., London, Ont.
*The Electric Steel & Metals Co., Ltd., Welland, Ont.
PUMPS, boiler feed
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
*Bawden Machine Co., Ltd., Toronto, Ont.
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

* For Display Advertisement see Index Page 37

PUMPS, centrifugal
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
*M. Beatty & Sons, Ltd., Welland, Ont.
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
*Dominion Forge & Stamping Co., Ltd., Walkerville, Ont.
*Wentworth Mfg. Co., Hamilton.

PUMPS, hydraulic
*The Hydraulic Machinery Co., Limited, Montreal.

PUMPS, turbine and reciprocating
*Bawden Machine Co., Ltd., Toronto, Ont.
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.

PUNCHES
*John Whitfield Co.,Toronto, Ont.
*Pratt & Whitney Co., Dundas,Ont.

PYROMETERS
*Canadian Hoskins Co., Walkerville, Ont.

RADIATORS
Taylor-Forbes Co., Ltd., Guelph, Ont.
Warden King, Ltd., Montreal, Que.

RAILINGS, brass and iron
*Dennis Wire & Iron Works Co., London, Ont.

RAILS, light
Hammant Steel Car & Engineering Works, Hamilton, Ont.

RAILWAY SIGNAL APPLIANCES
General Railway Signal Co. of Canada, Ltd., Montreal, Que.

RAILWAY SUPPLIES
*Canadian Steel Foundries, Ltd., Montreal, Que.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
B. J. Coghlin Co., Ltd., Montreal, Que.

RAILWAY TARIFF BINDERS
The Esdale Press, Ltd., Edmonton, Alta.

READY-TO-WEAR GARMENTS, ladies'
H. C. Boulter Co., Ltd., Toronto.

REAMERS
*Pratt & Whitney Co., Dundas, Ont.
*Butterfield & Co., Rock Island, P.Q.

RECEPTACLES
*Crouse-Hinds Co., Ltd., Toronto.

REED AND RATTAN GOODS
Canada Furniture Mfgs., Ltd., Woodstock, Ont.

REFRIGERATORS
Sanderson-Harold Co., Ltd., Paris, Ont.
Lee Mfg. Co., Ltd., Pembroke, Ont.

REFRIGERATING MACHINERY
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

REFRIGERATORS, store, homes and institutions
Ham & Nott Co., Ltd., Brantford, Ont.
John Hillock & Co., Ltd., Toronto.

REINFORCEMENT BARS
*Burlington Steel Co., Ltd., Hamilton, Ont.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
*Trussed Concrete Steel Co., Ltd., Walkerville, Ont.

REINFORCEMENT FOR CONCRETE
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Trussed Concrete Steel Co. of Canada, Ltd., Walkerville, Ont.

REINFORCEMENT FOR CONCRETE ROOFING, metal
*The Pedlar People, Ltd., Oshawa, Ont.
*Trussed Concrete Steel Co., Ltd., Walkerville, Ont.

REVOLVING DOORS
*A. B. Ormsby Co., Ltd., Toronto.

RINGS, gold
Caron Bros., Montreal, Que.

RIVETERS, pneumatic
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

RIVETS
*Canadian Tube & Iron Co., Ltd., Montreal, Que.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
*Stowell Screw Co., Ltd., Montreal.

RIVETS, bifurcated and tubular
Parmenter & Bullock Co., Ltd., Gananoque, Ont.

RIVETS AND BURRS, iron, copper and brass
Parmenter & Bullock Co., Ltd., Gananoque, Ont.

ROCK DRILLS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

ROLLING STEEL DOORS
*A. B. Ormsby Co., Ltd., Toronto.

ROLL PRINTING
*Autographic Register Co., Ltd., Montreal, Que.
Business Systems, Ltd., Toronto.

ROOFING, metal
*A. B. Ormsby Co., Ltd., Toronto.

ROOFINGS, plastic, liquid, rubber
*Beveridge Paper Co., Ltd., Montreal and St. John, N.B., Supply Department.

ROOFING, ready to lay
Pacific Roofing Co., Vancouver, B.C.
Standard Paint Co. of Canada, Ltd., Montreal, Que.
*The Barrett Co., Ltd., Toronto and Montreal.

ROOF TRUSSES
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*Dominion Bridge Co., Ltd., Montreal, Que.

ROPE
*Doon Twines, Ltd., Doon, Ont.
*Shurly & Derrett, Ltd., Toronto.

ROPE, cotton
Hamilton Cotton Co., Hamilton, Ont.

RUBBER FOOTWEAR
Ames Holden, McCready, Ltd., Montreal, Que.
*Gutta Percha & Rubber Ltd., Toronto, Ont.
The Miner Rubber Co., Ltd., Grandy, Que.

RUBBER GOODS
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Dunlop Tire & Rubber Goods Co., Ltd., Toronto, Ont.
*Gutta Percha & Rubber Limited, Toronto.

RUBBER MACHINERY
*The Hydraulic Machinery Co., Limited, Montreal.

RUBBER MOULDS
Bawden Machine Co., Ltd., Toronto, Ont.

RUBBER PACKING
*Dunlop Tire & Rubber Goods Co., Ltd., Toronto, Ont.
*Garlock Packing Co., Hamilton, Ont.

RULES
The Lufkin Rule Co. of Canada, Ltd., Windsor, Ont.

SADDLERY HARDWARE
*Dominion Forge & Stamping Co., Walkerville, Ont.
*McMinnon Industries, Ltd., St. Catharines, Ont.

SAFES
*Goldie & McCulloch Co., Ltd., Galt, Ont.
J. & J. Taylor, Ltd., Toronto.

SAMPLE CASES
The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto, Ont.
J. Eveleigh & Co., Ltd., Montreal, Que.

SAND RAMMERS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.

SANDPAPER
*Delaney & Pettit, Ltd., Toronto.

SASH CORD, cotton
Hamilton Cotton Co., Hamilton, Ont.

SALT
Canadian Salt Co., Ltd., Windsor, Ont.
*Dominion Salt Co., Ltd., Sarnia, Ont.

SANITARY PAPER TOWELS
*E. B. Eddy Co., Ltd., Hull, Que.

SAVE-ALLS
*The Hydraulic Machinery Co., Limited, Montreal.

SAW SHARPENING MACHINERY
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

SAWS
*E. C. Atkins & Co., Ltd., Hamilton, Ont.
Henry Disston & Sons, Ltd., Toronto, Ont.
Shurly & Deitrich, Galt, Ont.

SAWS, cross-cut and band
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
Shurly & Deitrich, Galt, Ont.

SAWS, circular mill
Shurly & Deitrich, Galt, Ont.

SAWS, hack
*Victor Saw Works, Ltd., Hamilton, Ont.

SAWS, of all kinds
Simonds Canada Saw Co., Ltd., Montreal, Que.

SAWS, rip
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
Shurly & Deitrich, Galt, Ont.

SAWMILLS
G. & J. Esplen, Montreal, Que.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

SAW MILL MACHINERY
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.

SAWS, specialties
*Victor Saw Works, Ltd., Hamilton, Ont.

SCALES
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
The Gurney Scale Co., Hamilton, Ont.

SCALES, counter
The Gurney Scale Co., Hamilton, Ont.

SCALES, railway track, etc.
The Gurney Scale Co., Hamilton, Ont.

SCREENS
*Canada Wire & Iron Goods Co., Hamilton, Ont.

SCREEN DOORS AND WINDOWS
Sanderson-Harold Co., Ltd., Paris, Ont.
Ham & Nott Co., Ltd., Brantford, Ont.

SCREWS
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.
*The National Acme Mfg. Co., Montreal, Que.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
*Stowell Screw Co., Ltd., Montreal, Que.

SCREW PLATES
*Butterfield & Co., Rock Island, P.Q.

SECURITIES, engraved
American Bank Note Co., Ottawa, Ont.

SERGES
Rosamond Woollen Co., Almonte, Ont.

SEWAGE SCREENS
*The Hydraulic Machinery Co., Limited, Montreal.

SHAFTING
Canada Forge Co., Ltd., Welland, Ont.
Bond Engineering Co., Toronto.
*Canadian Drawn Steel Co., Ltd., Hamilton, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.
*Dodge Mfg. Co., Ltd., Toronto.

SHANTY BLANKETS
Slingsby Mfg. Co., Ltd., Brantford, Ont.

SHAPERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.

SHEAR BLADES, iron
*Galt Knife Co., Ltd.
The Peter Hay Knife Co., Ltd., Galt, Ont.

SHEATHING
*The Barrett Co., Ltd., Toronto and Montreal.

SHEATHING, asbestos corrugated
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

SHEET METAL STAMPINGS
Acme Stamping & Tool Works, Ltd., Hamilton, Ont.
*The Pedlar People, Ltd., Oshawa, Ont.
*W. H. Banfield & Sons, Ltd., Toronto, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.

SHEETS, Etc.
*Tallhan Brass & Metal Co., Hamilton, Ont.

SHEETS, galvanized
*Dominion Sheet Metal Co., Ltd., Hamilton, Ont.
*The Pedlar People, Ltd., Oshawa, Ont.

SHINGLES
Bathurst Lumber Co., Ltd., Bathurst, N.B.

SHINGLE SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.

SHIP BUILDERS
J. & R. Weir, Montreal, Que.

SHIRTS
John W. Peck & Co., Ltd., Montreal, Que.

SHIRTS, workmen's
*A. R. Clarke & Co., Ltd., Toronto.

SHOE PEGWOOD
O. Chalifour, Quebec, Que.

SHOE LININGS
Galt Knitting Co., Ltd., Galt, Ont.

SHOES, running and athletic
Ames - Holden - McCready, Ltd., Montreal, Que.

SHOOKS
Barchard & Co., Ltd., Montreal.

SIGNAL CELLS
Canadian National Carbon Co., Ltd., Toronto.

SILENT CHAIN DRIVES
*Canadian Link-Belt Co., Toronto.

SILVER BULLION
Coniagas Reduction Co., Ltd., St. Catharines, Ont.
*Deloro Smelting & Refining Co., Ltd., Deloro, Ont.

SILVERSMITH
Canadian Wm. A. Rogers, Ltd., Toronto, Ont.
Standard Silver Co., Toronto, Ont.

SILVERWARE, sterling
Roden Bros., Ltd., Toronto, Ont.

SINGLETREES
*McKinnon Industries, Ltd., St. Catharines, Ont.

SINKS, enamelled
Amherst Foundry Co., Ltd., Amherst, N.S.

SKATES, figure
Canada Cycle & Motor Co., Ltd., Toronto, Ont.

SKATES, genuine Acme
Canada Cycle & Motor Co., Ltd., Toronto, Ont.

SKATES, hockey
Canada Cycle & Motor Co., Ltd., Toronto, Ont.

SKATES, ice
Canada Cycle & Motor Co., Ltd., Toronto, Ont.

SKIFFS
Peterboro Canoe Co., Ltd., Peterboro, Ont.

SKYLIGHTS
*A. B. Ormsby Co., Ltd., Toronto.
*The Pedlar People, Ltd., Oshawa, Ont.

SLEIGHS
Tudhope-Anderson Co., Ltd., Orillia, Ont.

SLIPPERS
Ames - Holden - McCready, Ltd., Montreal, Que.

SLOTTERS
*Canada Machinery Corporation, Ltd., Galt, Ont.

SMALL METAL STAMPINGS, in quantities
*Canadian Winkley Co., Ltd., Windsor, Ont.

SMOKE CONSUMERS
*The Jones Underfeed Stoker Co., Ltd., Toronto, Ont.

SMOKE-STACKS
*Steel Trough & Machine Co., Ltd., Tweed, Ont.
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.

SNAPS, for harness
*McKinnon Industries, Ltd., St. Catharines, Ont.

SOAPS
J. Barsalou & Co., Ltd., Montreal.

SOAP (soft, oil)
The Imperial Varnish & Color Co., Ltd., Toronto, Ont.
Sherwin-Williams Co. of Canada Ltd., Montreal, Que.

SOCKETS
*Crouse-Hinds Co., Ltd., Toronto.

SODA WATER FOUNTAINS
J. J. McLaughlin, Ltd., Toronto.

SODA WATER FOUNTAINS AND ACCESSORIES
Fletcher Mfg. Co., Ltd., Toronto.

SOIL PIPE
Anthes Foundry, Ltd., Toronto.

*For Display Advertisement see Index Page 37

SOLDER
Alonzo W. Spooner, Ltd., Port Hope, Ont.
*Canada Metal Co., Toronto, Ont.
*Hoyt Metal Co., Toronto, Ont.
*Tallman Brass & Metal Co., Hamilton, Ont.

SOLDER, silver
Geo. H. Lees & Co., Hamilton, Ont.

SOLDER, wire and bar
*American Can Co., Montreal, and Hamilton.

SOLDERING IRONS AND COPPERS
Brown, Boggs Co., Ltd., Hamilton.

SNOWSHOES
Holt, Renfrew, Ltd., Quebec, Que.

SPECIAL MACHINERY
*Globe Engineering Co., Ltd., Hamilton, Ont.

SPELTER
*Consolidated Mining & Smelting Co. of Canada, Ltd., Toronto.

SPIKES, railway and marine
Starr Mfg. Co., Ltd., Dartmouth, N.S.

SPINNING AND STAMPING
Tallman Brass & Metal, Ltd., Hamilton, Ont.

SPIRAL CONVEYORS
*Canadian Mathews Gravity Carrier Co., Ltd., Toronto, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

SPLIT PEAS
H. Murton, Ltd., Guelph, Ont.

SPIRITS
*Hiram Walker & Sons, Ltd., Walkerville, Ont.

SPOOLS
Canada Spool & Bobbin Co., Ltd., Walkerton, Ont.

SPORTING MEDALS AND TROPHIES
Roden Bros., Ltd., Toronto, Ont.

SPRAYERS
Spramotor Co., London, Ont.

SPRING COTTERS
*Richards-Wilcox Canadian Co., Ltd., London, Ont.

SPRINGS
*Canadian Steel Foundries, Ltd., Montreal, Que.
B. J. Coghlin Co., Ltd., Montreal.
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

SPRINGS, carriage and automobile
Guelph Spring & Axle Co., Ltd.,

SPRING SHACKLE BOLTS
*Canadian Winkley Co., Ltd., Windsor, Ont.
John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.

SPRINKLER SYSTEMS
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*The Bennett & Wright Co., Ltd., Toronto, Ont.
*Purdy, Mansell, Ltd., Toronto.
*Vogel Co. of Canada, Ltd., Montreal. Que.

SPROCKET WHEELS
*Canadian Link Belt Co., Ltd., Toronto, Ont.

STAINS
R. C. Jamieson & Co., Ltd., Montreal, Que.

STAINS, creosote shingle
A. Muirhead Co., Ltd., Toronto.

STAMPINGS

STAMPINGS, heavy steel
Canadian Cartridge Co., Ltd., Hamilton, Ont.

STAMPS, steel, brass and rubber
Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

STAMP MILLS
*Jenckes Machine Co., Sherbrooke, P.Q.

STATIONERY, office
Harris Lithographing Co., Toronto.

STEAM PIPE AND BOILER COVERINGS, asbestos
*Eureka Mineral Wool & Asbestos Co., Toronto.

STEAM SHOVELS
*M. Beatty & Sons, Ltd., Welland, Ont.

STEAM SPECIALTIES
*C. A. Dunham Co., Ltd., Toronto.
*Darling Bros., Ltd., Montreal, Que.
*Sheldons, Ltd., Galt, Ont.

STEAM TRAPS
*C. A. Dunham Co., Ltd., Toronto.
*Canadian Morehead Mfg. Co., Ltd., Woodstock, Ont.

STEEL
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.
*Burlington Steel Co., Ltd., Hamilton, Ont.
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.

STEEL BILLETS AND BLOOMS
*The Steel Co. of Canada, Ltd., Hamilton, Ont.

STEEL BUILDINGS
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*Dominion Bridge Co., Ltd., Montreal, Que.
*Maritime Bridge Co., Ltd., New Glasgow, N.S.
*McGregor & McIntyre, Ltd., Toronto, Ont.
*MacKinnon Steel Co., Limited, Sherbrooke, P.Q.
*The Pedlar People, Ltd., Oshawa, Ont.
*Trussed Concrete Steel Co. of Canada, Ltd., Walkerville, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.

STEEL CABINETS
J. & J. Taylor, Ltd., Toronto, Ont.

STEEL CASTINGS
Beauchemin & Fils, Ltd., Sorel, Que.
*Canadian Steel Foundries, Ltd., Montreal, Que.
*Dominion Steel Foundry Co., Ltd., Hamilton, Ont.
*Electric Steel & Metals Co., Ltd., Welland, Ont.

STEEL DOORS, rolling
*The A. B. Ormsby Co., Ltd., Toronto, Ont.

STEEL FILING EQUIPMENT
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

STEEL PLATE WORK
*MacKinnon Steel Co., Limited, Sherbrooke, P.Q.
*Toronto Iron Works, Ltd., Toronto.

STEEL RODS
*The Steel Co. of Canada, Ltd., Hamilton, Ont.

STEEL SASH
*Dennis Wire & Iron Works Co., London, Ont.
*Trussed Concrete Steel Co. of Canada, Ltd., Walkerville, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.

STEEL SHELVING
*Dennis Wire & Iron Works Co., London, Ont.

STEEL WIRE RODS
*The Steel Co. of Canada, Ltd., Hamilton, Ont.

STEEL WAGON HARDWARE
*McKinnon Industries, Ltd., St. Catharines, Ont.

STELLITE
*Deloro Smelting & Refining Co., Ltd., Deloro and Toronto.

STENCILS, brass
Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

STEPS, for buggies and carriages
*McKinnon Industries, Ltd., St. Catharines, Ont.

STEREO TISSUE AND BLOTTINGS
*Beveridge Paper Co., Ltd., Montreal and St. John, N.B., Supply Department.

STEREOTYPING
Central Press Agency, Toronto.

STOKERS
*The Jones Underfeed Stoker Co., Ltd., Toronto, Ont.

STOOLS AND BENCHES, piano and organ
*Otterville Mfg. Co., Ltd., Otterville, Ont.

STOOLS, steel factory
*Steel Trough & Machine Co., Ltd., Tweed, Ont.

STONE
The Hagersville Contracting Co., Hagersville, Ont.

STONEWARE
*Jas. W. Foley & Co., St. John, N.B.

STORAGE BATTERIES
*Canadian General Electric Co., Ltd., Toronto, Ont.

STORE FITTINGS
The Canadian Office & School Furniture Co., Ltd., Preston, Ont.

STOVES
Smith Foundry Co., Ltd., Fredericton, N.B.
Tudhope - Anderson Co., Ltd., Orillia, Ont.

STOVE LININGS
Standard Clay Products, Ltd., St. John's Que.

STOVES AND RANGES
Lee Mfg. Co., Ltd., Pembroke, Ont.
The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.
McClary Mfg. Co., London, Ont.

STRAWS, paper drinking
Fletcher Mfg. Co., Ltd., Toronto.

STRAWBOARD
*Canada Boxboard Co., Ltd., Montreal, Que.

STREET LIGHTING FIXTURES
*Crouse-Hinds Co., Ltd., Toronto.

STRETCHERS, lace curtain
*Otterville Mfg. Co., Ltd., Otterville, Ont.

STRUCTURAL STEEL
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
*Dominion Bridge Co., Montreal.
*Hamilton Bridge Works Co., Ltd., Hamilton, Ont.
*Manitoba Bridge & Iron Works, Ltd., Winnipeg, Man.
*McGregor & McIntyre, Ltd., Toronto, Ont.
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
*The Canadian Bridge Co., Ltd., Walkerville, Ont.

STUMP EXTRACTORS
*The John Whitfield Co., Toronto.

SUIT CASES
J. Eveleigh & Co., Ltd., Montreal.
The M. Langmuir Mfg. Co. of Toronto, Ltd., Toronto, Ont.

SULPHUR BURNERS
*The Hydraulic Machinery Co., Limited, Montreal.

SUPPLY DEALERS
*The Foundation Co., Ltd., Montreal, Que.

SURFACERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.

SWITCHBOARDS
*Canadian General Electric Co., Ltd., Toronto, Ont.
*Crouse-Hinds Co., Ltd., Toronto.

SWITCHES
*Crouse-Hinds Co., Ltd., Toronto.

SWITCHES, railway
Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.

SWITCHES AND FROGS
*Canadian Steel Foundries, Ltd., Montreal, Que.

SWITCH STANDS
Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.

TABLE COVERS, chenille
Hamilton Cotton Co., Hamilton, Ont.

TANKS
Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
*Toronto Iron Works, Ltd., Toronto.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
Goold - Shapley - Muir Co., Ltd., Brantford, Ont.
*E. Leonard & Sons, Ltd., London, Ont.
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
*Maritime Bridge Co., Ltd., New Glasgow, N.S.
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

TANKS, steel storage
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
*Steel Trough & Machine Co., Ltd., Tweed, Ont.

TANNERS' SUPPLIES
McClary Mfg. Co., London, Ont.

TAPS
*Butterfield & Co., Rock Island, P.Q.
*Pratt & Whitney Co., Dundas, Ont.

TAPES, measuring
The Lufkin Rule Co. of Canada, Ltd., Windsor, Ont.

TELEPHONE ACCESSORIES
*Canadian Independent Telephone Co., Toronto, Ont.
*Northern Electric Co., Ltd., Montreal, Que.

TENTS
Turner, J. J., & Sons, Peterboro, Ont.
*Scythes & Co., Ltd., Toronto, Ont.

TERMINALS, electric cable
*Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.

TERRA ALBA
*Albert Mfg. Co., Hillsborough, N.B.

TERRA COTTA, architectural
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.

TEXTILE SUPPLIES (shuttles, bobbins, spools and picker sticks)
The Lachute Shuttle Co., Ltd., Lachute Mills, P.Q.

THUMB SCREWS
*Canadian Billings & Spencer, Ltd., Welland Ont.

TIE TAMPERS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

TIE PLATES, for railways
*McKinnon Industries, Ltd., St. Catharines, Ont.

TILING, rubber
Dunlop Tire & Rubber Goods Co., Ltd., Toronto, Ont.
*Gutta Percha & Rubber Ltd., Toronto, Ont.

TIME RECORDERS
*International Business Machines Co., Ltd., Toronto, Ont.

TINWARE, lithographed
*MacDonald Mfg. Co., Ltd., Toronto, Ont.

TIRES, bicycle, auto, carriage, truck, motorcycle.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto, Ont.
*Gutta Percha & Rubber Ltd., Toronto, Ont.

TOILET PAPER, towels, tissues
*Beveridge Paper Co., Ltd., Montreal and St. John, N.B., Supply Department.

TOOLS
*The John Whitfield Co., Toronto,

TOOLS, pneumatic
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

TOOLS, track
B. J. Coghlin Co., Ltd., Hamilton.

TOOLS, sheet metal workers'
Brown, Boggs Co., Ltd., Hamilton.

TRACK, steel, portable
Hammant Steel Car & Engineering Works, Hamilton, Ont.

TRADE MARKS AND DESIGNS
Ridout & Maybee, Toronto, Ont.

TRANSFORMERS
*Canadian General Electric Co., Ltd., Toronto, Ont.
*The Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.

TRANSLATIONS INTO FRENCH
Raoul Renault, Quebec City.

TRANSMISSION MACHINERY
Bond Engineering Co., Toronto.
*Canadian Link Belt Co., Toronto.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

TRAPS
*C. A. Dunham Co., Ltd., Toronto.
*Canadian Morehead Mfg. Co., Woodstock, Ont.

TROLLEYS
*Richard-Wilcox Canadian Co., Ltd., London, Ont.
*Northern Crane Works, Ltd., Walkerville, Ont.

TRUCKS
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
The Gurney Scale Co., Hamilton.
*Northern Crane Works, Ltd., Walkerville, Ont.

TRUCKS, brick, tile and lumber
*Waterous Engine Works Co., Ltd., Brantford, Ont.

TRUCKS, motor
*National Steel Car Co., Ltd., Hamilton, Ont.

TRUCKS, warehouse and factory
The W. S. Mahaffy Co., Toronto.

TRUCKS, steel, forge and foundry
Hammant Steel Car & Engineering Works, Hamilton, Ont.

TRUCKS FOR OFFICE AND VAULT USE
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

TRUNKS
Lamontagne, Ltd., Montreal, Que.
J. Eveleigh & Co., Ltd., Montreal.
The M. Langmuir Mfg. Co. of Toronto, Ltd., Toronto.

*For Display Advertisement see Index, Page 37

TUBING, brass and copper
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
Canadian Seamless Wire Co., Toronto, Ont.
*Tallman Brass & Metal Co., Hamilton, Ont.
*Dominion Copper Products Co., Ltd., Montreal, Que.

TUBING, gold and silver
Canadian Seamless Wire Co., Toronto, Ont.

TUBES, ice cream
Fletcher Mfg. Co., Ltd., Toronto.

TUMBLERS, foundry
*Northern Crane Works, Ltd., Walkerville, Ont.
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.

TURBINES, steam
*The Canadian Crocker-Wheeler Co., Ltd., St. Catharines.

TURBINE PUMPS
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

TURPENTINE
*Brown Corporation, La Tuque, Que.

TWEEDS
Rosamond Woollen Co., Almonte, Ont.

TWINES
*Doon Twines, Ltd., Doon, Ont.
*Shurly & Derrett, Ltd., Toronto.

TWINES, binder
Brantford Cordage Co., Ltd., Brantford, Ont.

TWINES, cotton
Hamilton Cotton Co., Hamilton, Ont.

TWIST DRILLS
*John Morrow Screw & Nut Co., Ltd., Ingersoll.
*Pratt & Whitney Co. of Canada, Dundas, Ont.
*The Wilt Twist Drill Co., Ltd., Walkerville, Ont.

UNDERWEAR
Galt Knitting Co., Ltd., Galt, Ont.

UNDERWEAR, imperial
Kingston Hosiery Co., Ltd., Kingston, Ont.

UNIONS
*Dart Union Co., Ltd., Toronto.
*Otterville Mfg. Co., Ltd., Otterville, Ont.

UPHOLSTERED FURNITURE, leather and tapestries
Imperial Rattan Co., Ltd.

VALVES
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*Jenkins Bros., Ltd., Montreal, Que.
*Kerr Engine Co., Ltd., Walkerville, Ont.
T. McAvity & Sons, Ltd., St. John, N.B.
*Penberthy Injector Co., Ltd., Windsor, Ont.

VALVES, for steam and water
*Jenkins Bros., Ltd., Montreal.
*Mueller Mfg. Co., Ltd., Sarnia, Ont.
*Penberthy Injector Co., Ltd., Windsor, Ont.
James Morrison Brass Mfg. Co., Ltd., Toronto, Ont.

VALVES, pressure reducing
*Mueller Mfg. Co., Ltd., Sarnia, Ont.

VALVES, regrinding globe, angle, cross checks, swing checks
*Mueller Mfg. Co., Ltd., Sarnia, Penberthy Injector Co., Ltd., Windsor, Ont.

VALVES, regulating
*Mueller Mfg. Co., Ltd., Sarnia, Ont.

VALVES, rubber
Dunlop Tire & Rubber Goods Co., Ltd., Toronto, Ont.

VARNISHES
*Ault & Wiborg Co. of Canada, Ltd., Toronto, Ont.
Berry Bros., Walkerville, Ont.
R. C. Jamieson & Co., Ltd., Montreal, Que.

VAULT FITTINGS, steel
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

VAULTS AND VAULT DOORS
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
J. & J. Taylor, Ltd., Toronto, Ont.

VENTILATING APPLIANCES
*Sheldons, Ltd., Galt, Ont.

VENTILATING SYSTEMS
Gurney Foundry Co., Ltd., Toronto, Ont.

VENTILATORS
*A. B. Ormsby, Ltd., Toronto, Ont.
*The Pedlar People, Ltd., Oshawa, Ont.

VOLTMETERS AND AMMETERS
*Crouse-Hinds Co., Ltd., Toronto.

WAGONS
Tudhope Anderson Co., Ltd., Orillia, Ont.

WAGON HARDWARE
*McKinnon Industries, Ltd., St. Catharines, Ont.

WALL COPING
Standard Clay Products, Ltd., St. John's, Que.

WASHERS
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
*United Brass & Lead, Ltd., Toronto, Ont.

WASHERS, plate or wrought
London Rolling Mill Co., Ltd., London, Ont.

WASTES, wool and cotton
Factory Waste & Metal Co., Montreal, Que.
*Scythes & Co., Ltd., Toronto, Ont.

WATERPROOF, cement coating
Benjamin Moore & Co., Ltd., Toronto, Ont.
*Beveridge Paper Co., Ltd., Montreal and St. John, N.B., Supply Department.
*The Barrett Co., Ltd., Toronto and Montreal.
*Trussed Concrete Steel Co. of Canada, Ltd., Walkerville, Ont.

WATERPROOF, caselining
*Beveridge Paper Co., Ltd., Montreal and St. John, N.B., Supply Department.

WATER WHEELS
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.

WEBBING, elastic
Hamilton Cotton Co., Hamilton, Ont.

WEBBING, non-elastic
Hamilton Cotton Co., Hamilton, Ont.

WELDING APPARATUS AND MATERIALS
*The Presto-O-Lite Co., Toronto.

WELL-DIGGING TOOLS AND MACHINERY
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.

WHEEL FLANGES
*McKinnon Industries, Ltd., St. Catharines, Ont.

WHEELS
*Canadian Car & Foundry Co., Ltd., Montreal, Que.

WHEELS, corundum
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

WHEELS, emery
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

WELL DRILLING TOOLS AND MACHINERY
Oil Well Supply Co., Ltd., Petrolia, Ont.

WHIPS AND LASHES
Lay Whip Co., Rock Island, Que.

WHIPSOCKETS
*McKinnon Industries, Ltd., St. Catharines, Ont.

WHITE ARSENIC
Coniagas Reduction Co., Ltd., St. Catharines, Ont.

WHITE LEAD
Brandram-Henderson, Ltd., Montreal, Que.
A. Ramsay & Son Co., Montreal.

WINDMILLS
*Goold - Shapley - Muir Co., Ltd., Brantford, Ont.
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.
*Medicine Hat Pump & Brass Mfg. Co., Medicine Hat, Alta.

WINDOW SHADES
Daly & Morin, Montreal, Que.

WIRE
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
*Laidlaw Bale Tie Co., Ltd., Hamilton, Ont.
*Eugene F. Phillips, Electrical Works, Ltd., Montreal, Que.
The Graham Nail Works, Toronto.

WIRE BALE TIES
*Laidlaw Bale Tie Co., Ltd., Hamilton, Ont.

WIRE CLOTH
*Canada Wire & Iron Goods Co., Hamilton, Ont.
C. H. Johnston & Sons, Ltd., Montreal, Que.

WIRE, feeder and trolley
*Eugene F. Phillips, Electrical Works, Ltd., Montreal, Que.
*Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.

WIRE GUARDS
*Canada Wire & Iron Goods Co., Hamilton, Ont.
C. H. Johnston & Sons, Ltd., Montreal, Que.

WIRE, insulated electric
*Northern Electric Co., Ltd., Montreal, Que.
*Eugene F. Phillips Electrical Works, Ltd., Montreal, Que.
*Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.

WIRE, weatherproof
*Northern Electric Co., Ltd., Montreal, Que.
*Eugene F. Phillips Electrical Works, Ltd., Montreal, Que.
*Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.

WIRE ROPE
*Dominion Wire Rope Co., Ltd., Montreal, Que.
*The B. Greening Wire Co., Ltd., Hamilton, Ont.

WIRE WORK
C. H. Johnson & Sons, Ltd., Montreal, Que.
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*The Geo. B. Meadows, Toronto Iron & Brass Goods Works Co., Ltd., Toronto, Ont.

WIRING DEVICES
*Crouse-Hinds Co., Ltd., Toronto.

WOOD
Standard Fuel Co., Toronto, Ont.

WOOD BORERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

WOOD PRINTERS
Barchard & Co., Ltd., Toronto.

WOOD PULP, mechanical
La Cie de Pulpe de Chicoutimi, Chicoutimi, Que.

WOODBOARD
*Canada Boxboard Co., Ltd., Montreal, Que.

WOOD SHOP, general work
*Canadian Rumely Co., Ltd., Toronto, Ont.

WOOD SPLIT PULLEYS
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

WOOD STAVE PIPE
T. A. Morrison & Co., Montreal.

WOOL
*H. V. Andrews, Toronto, Ont.

WOOD TURNING
Canada Spool & Bobbin Co., Ltd., Walkerton, Ont.

WORSTED COATINGS AND SUITINGS
Rosamond Woollen Co., Almonte, Ont.

WRAPPERS, book, bottle, etc.
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.

WRENCHES
*McKinnon Industries, Ltd., St. Catharines, Ont.

WROUGHT IRON PIPE
*The Steel Co. of Canada, Ltd., Hamilton, Ont.

WROUGHT PIPE
*The Steel Co. of Canada, Ltd., Hamilton, Ont.

YARNS, cotton
Hamilton Cotton Co., Hamilton, Ont.

ZINC, electrical
*The Canada Metal Co., Toronto.

* For Display Advertisement see Index, Page 37

Will Not Rebuild

Canada Furniture Manufacturers Do Not Intend to Restore Burned Factory at Wiarton

It is not the intention of the Canada Furniture Manufacturers, Limited, to rebuild the chair factory at Wiarton, Ont., which was destroyed by fire on the night of October 1, with an approximate loss of $75,000. Taking into consideration the labor situation at the present time and the high cost of building, the management do not regard it as a wise thing to do to restore the industry. Instead, many of the lines which were formerly made at Wiarton will be manufactured in the Woodstock plant. Facilities at the latter plant are such as to make it possible for the company to turn out a much larger output, if only the labor can be procured, and no effort will be spared to procure this labor.

Belgian Sample Fair

Belgians Anxious to See Closer Trade Relations Between their Country and Canada

A letter has been received by the Commercial Intelligence Branch, Department of Trade and Commerce, Ottawa, from the Agent-General of the Province of Quebec in Brussels, Belgium, announcing that the Brussels Sample Fair will be held from April 4 to 21, 1920. He adds: "Belgians expect the Canadian manufacturers and exporters will attend this Fair with their samples. They are anxious to see closer trade relations between the two countries. Entries can be made up to January 15. Here are the prices of the stands; covered stands 4 x 3 yards, frs. 600; open stands, frs. 25 per square yard. Each firm will have to pay a fee of frs. 5 for its registration in the official catalogue."

CANADA'S INDUSTRIAL EXPANSION

Continued from page 72

Will Make Steel Tires

Company Formed in Montreal to Engage in Important Industry in Field of Railway Equipment

In anticipation of an increasing demand by Canadian railway corporations for steel tires for locomotive and passenger equipment, a company known as the Canadian Steel Tire & Wheel Co. has been formed, with a view to establishing a plant for their manufacture in this country. The company have acquired a plant on Marien Avenue, Montreal East, formerly used in the manufacture of munitions, and are rearranging it to suit their requirements. They expect to have the machinery installed and to be ready to start operations about the middle of January and at first will employ from fifty to sixty hands.



Mr. F. J. Buller

Vice-president and Manager of the newly-formed Canadian Steel Tire and Wheel Company, Limited

It is understood that American capital is behind this enterprise, though the management is in Canadian hands. The vice-president and managing director is Mr. F. J. Buller, formerly treasurer of the Canadian National Railways at Toronto, who has resigned from the latter position to take up this new line of work. On the directorate is also Mr. K. W. Blackwell, of Montreal, director of the Canadian Car & Foundry Co. The superintendent is Mr. Stephen H. Williams, an experienced producer.

Mr. Buller is a well-known figure in Canadian railway circles. He has been in the service of the Canadian Northern and Canadian National Railways for nearly twenty years and through this connection has acquired an intimate knowledge of railway management, especially in the financial end, which will prove of value to him in his new position.

Tire Factory Increases Capacity

Additions to Goodyear Plant at New Toronto Will Jump Tire Capacity from 2,500 to 3,500 per Day

Three extensions and two smaller buildings are at present in course of erection at the New Toronto plant of the Goodyear Tire & Rubber Co. of Canada, Limited. The present main building is 100 feet wide by 460 feet long, four storeys and basement. One of the extensions makes a 100-foot addition to the main building. The other two extensions, measuring 100 x 120 feet, four storeys and basement, are connected to and run south of the main building. There is also under construction a building 80 x 50 feet to be used for the manufacture of chemicals and another 50 x 75 feet. These various additions, which should be ready for use by the end of the year, will give an increased capacity of 1,000 pneumatic automobile tires per day, bringing the output up to 3,500 tires. In addition to automobile tires the plant is thoroughly equipped for the production of motorcycle and bicycle tires, automobile, motorcycle and bicycle accessories. At present the factory is operating to full capacity on a 24-hour day. The company have not been able to fill all their tire orders for a period of about two years.

New Box Factory

Peterboro Industry Acquires Land from City on which to Make Needed Plant Extension

The City of Peterboro is selling the Alfred McDonald Lumber Co., Limited, a piece of land adjoining their present plant, on which they will erect a box factory and storage shed, the main building being 50 x 50 feet. The company have been in the box-making business for some years, but find their present quarters too cramped. The building at present used as box-factory also houses planing mill, sash and door factory. By removing the box-factory, space will be available for the development of other departments.

Cotton Mill Extension

Milltown Plant of Canadian Cottons, Limited, Being Enlarged at a Cost of $750,000

To take care of their steadily increasing business in fine dress ginghams, Canadian Cottons, Limited, are erecting a large weave shed in connection with their mill at Milltown, N.B. The new building will be approximately 410 feet long by 186 feet wide, consisting of a basement and one floor. All the foundation walls are of concrete and the columns, beams and girders throughout are of B. C. fir. The flooring is also of B. C. fir with hardwood top. When completed, which will hardly be before the first of next September, it will be one



Foundation Work for Mill

Big Extension under way for Canadian Cotton, Limited, at Milltown, N.B.



"GENUINE OAK"

LEATHER BELTING

"D.K."

BALATA BELTING

Guaranteed to Give Satisfaction

D. K. McLAREN LIMITED

TORONTO MONTREAL ST. JOHN, N.B

849 Beatty Street, VANCOUVER

LEATHER BELTING

Made in Canada

J. L. Goodhue & Co., Limited

DANVILLE, QUEBEC

Manufacturers of

SUPERIOR QUALITY LEATHER BELTING AND LACE LEATHER

QUALITY

Not Price Our Aim

Canadian Manufacturers SHOULD USE Canadian Belting

Winnipeg Agents:
BISSETT & WEBB, Limited
126 Lombard St.
Winnipeg, Man.

Vancouver Agents:
FLECK BROS., Limited
54 Cordova Street East
Vancouver, B.C.

Montreal Agents

STANDARD MACHINERY & SUPPLIES, Ltd.

260 ST. JAMES ST., MONTREAL

of the finest plants of its kind in America, costing about $750,000.

Referring to the new addition, Mr. A. O. Dawson, vice-president and managing director of Canadian Cottons, Limited, says,—"The only thing that is at all worrying me is as to whether we will be able to get the necessary help to run the plant when it is ready. We are hopeful, however, that we will be able to secure the necessary help, as we can draw from the American side of the River, as well as from the Canadian. In fact, nearly half our employees at that mill are American citizens, having their homes in Calais, Maine, and coming c[illegible] to Milltown each day to earn their living."

New Whitewear Industry

Two Owen Sound Men Arrange to Start Manufacturing Industry in their Home Town

As reported by the Owen Sound *Sun-Times*, Messrs. Robert McKnight and J. J. Kelley are arranging to open a factory for the manufacture of whitewear in that town. They have leased a flat known as Lemon's Hall and expect to start manufacturing in November with about 20 girl operators. Mr. McKnight is a returned officer, who was formerly engaged in the whitewear industry in Montreal. Mr. Kelley until recently was a member of the dry goods firm of Brookes & Kelley. Local capital is interested.

New Electric Conduit Plant

Canadian Allis-Chambers, Limited, Are Erecting a New Building at Their Toronto Works

A plant for the purpose of electro galvanizing and enameling electric conduit is at present being erected by Canadian Allis-Chalmers, Limited, in connection with their Toronto works, and will be ready for occupation about the first of February next. This new department will, when in operation, employ about forty men and will have a capcity of about 12,000,000 feet per annum of the highest quality conduit, in sizes from ½ in. to 4 in. in diameter. The building will be 650 ft. x 150 ft., one story high, of fireproof construction, and will contain the most up-to-date equipment used in the process of zinc plating. Steel trusses span the entire width, with 20 ft. of head room above floors, and electric mono-rail cranes will operate over the pickling and plating tanks. There will be three complete dynamos, each of 5,000 amperes capacity, while in addition to the equipment used in the process of zinc plating the plant will be equipped with baking furnaces and other appliances required in the process of black enameling conduit.

New Paper Products

Howard Smith Paper Mills, Limited, Will Develop a Number of New Lines at Cornwall

In connection with the recently announced purchase of the Toronto Paper Company's Mill at Cornwall by the Howard Smith Paper Mills, Limited, an interesting announcement is made by Mr. C. Howard Smith, president of the latter company. Mr. Smith states that the plant at Cornwall is well adapted to make certain grades of paper that have not hitherto been manufactured in Canada.

"The programme that we have laid out," says Mr. Smith, "is to put this plant in first-class shape to develop lines of business that are not made in Canada to any extent. I might mention blotting paper, which is almost altogether imported from the United States; bristol and index boards, of which there are very small quantities made in Canada, and high-grade cover papers. Doubtless there will be other lines that we will make when the market opens up for them. As you

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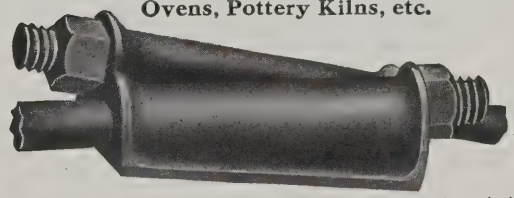
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are doubtless aware, the imports of paper into Canada for the last fiscal year amounted to something over $8.000,000. Believing, as I do, in the necessity of Canada making every possible article it can for its own use and exporting the surplus, in this item of $8,000,000, there is a great opportunity for our plant."

The plant taken over is situated on the Cornwall Canal, and has good water power and an excellent quality of water. The mill is well and substantially built of brick and covers an extensive area of ground. It has railway facilities with the G.T.R., C.P.R., and O. & N.Y., as well as boat transportation to Montreal and Toronto. In this respect it occupies a unique position in Canada. The plant is well organized, having good men at the head of the different departments, Mr. W. J. Wallace, Treasurer of the Company, being one of the prominent figures in the Canadian paper industry. Besides the paper mill, which contains four machines, there is a sulphite plant, with a capacity of about 20 tons of bleached sulphite a day.

With the acquisition of this mill at Cornwall, Howard Smith Paper Mills, Limited, will have three divisions, which will enable them to carry out their policy of specialization to still better advantage. It will be their policy to make as few grades of paper as possible in each mill, which will result in the production of better paper on a more economic basis.

Will Make Small Motors

Branch Plant of Robbins & Myers Co., Springfield, Ohio, Being Erected in Brantford

One of the latest United States companies to decide upon manufacturing its product in Canada is the Robbins & Myers Co. of Springfield, Ohio, makers of small motors, who have selected Brantford as the home of their Canadian enterprise. A factory building, 150 x 380 feet, is being erected in the Holmedale Section, and this will be equipped with the latest type of machinery. Mr. Roy Booth, the manager, states that they expect to start production on January 1, employing approximately 500 people at the outset. The plant will have a capacity of 125,000 motors per year work and represents an aggregate investment of $500,000. Asked as to the connection between the Canadian industry and the parent concern, Mr. Booth stated that the arrangements had not yet been shaped up in concrete form.

Cut-to-Fit Houses

New British Columbia Plant Expected to Start Operations by End of January

A deal has recently been completed whereby The Cut-to-Fit Building Company, Ltd., with head office in Vancouver, have acquired 60 acres of land on the north arm of the Fraser River, on which there is now being erected a factory and mill for the manufacture of cut-to-fit houses. It is expected that by the end of January, 1920, the new plant will be in a position to handle 125,000 feet, equivalent to 5 houses per day.

Recently, through efforts put forth in the interests of British Columbia in London, the cut-to-fit house is gaining favor. The enormous demand for house accommodation in the United Kingdom, and the increase in the price of labor, has made it imperative that some cheaper means of housing the great populace be found. For months the Government of Great Britain refused to even consider the cut-to-fit house idea, but recently advice has been received from the British Columbia Agent-General in London, that the British Government is now ready to give mill-cut houses a trial.

The new plant of the Cut-to-Fit Building Company, Ltd., will be modern in all respects. All lumber will be brought

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from the saw-mills in dimension form, and cut and dressed to size. The new mill will have excellent shipping facilities, both by boat and rail, and present indications point to a large export business, in addition to the present steady demand from the North-West for houses, farm buildings, garages, etc., which this company will be in a position to manufacture.

New Packing Plant

Davis & Jones Launch Out in a Modest Way in City of Moncton, N.B.

A new packing plant for the Maritime Provinces is being established by the firm of Davis & Jones in Moncton, N.B. A two-story wooden factory building is being erected and it is hoped to start operations this month. For the present the firm will not do any slaughtering but will buy dressed hogs from the surrounding country. They will put on the market pork products of all kinds, as well as bologna, and at the outset will not employ more than five or six hands, as they plan to go very carefully until well established.

More Automobile Bodies

Capacity of Walkerville Plant of Fisher Body Co. of Canada Considerably Enlarged

Certain additions are at present being made to the plant at Walkerville, Ont., of the Fisher Body Co. of Canada, Limited, which will greatly increase its capacity. The company estimate that, when the additions are completed, the factory will have a capacity of approximately 300 open and 25 closed automobile bodies per day. It was recently reported that the company proposed to build a new five-story factory in Windsor, but Mr. V. A. Clemen, the manager, states that action on the building of this plant has been deferred until spring.

Coke Plant Operating

Granby Consolidated Mining, Smelting & Power Co. Start Work at New Anyox Plant

In July the Granby Consolidated Mining, Smelting & Power Co. began to produce coke and by-products in their coke ovens at Anyox, British Columbia. The big plant, which is the only one of its kind on the Pacific coast, has been two years in preparation and is now in full operation. Coal for the 32 ovens is supplied from the Granby's properties at Cassidy, Vancouver Island, from which steady shipments have been made to the northern smelter town for several weeks past. The coke produced is said to be of excellent quality, and continued operation is expected. The by-products of the coke plant include, toluol, benzol, sulphate of ammonia, and coal tar, for all of which there is a consuming market. The coal tar will be shipped to Vancouver to be fractioned into pitch and creosote, and will provide British Columbia points with a dependable product.

Stratford Factory Extending

Sixty Thousand Feet More of Floor Space Being Added to the Plant of Kindel Bed Co.

An "L" extension, 185 x 75 feet, three storeys and basement, is being added to the main building of the Kindel Bed Co., Stratford, giving that company about 60,000 feet more floor space. The work was started last summer, but is progressing more slowly than expected and will not be finished until February. A shipping shed for convenience in loading and unloading will also be added to the plant. The Kindel Bed Co. moved to Stratford from Toronto in 1916, and the business since that time has been growing fast.

Will Give More Employment

Enlargement of Brantford Plant Will Require Hiring of Hundred Additional Hands

Two additions to the plant at Brantford of the Slingsby Manufacturing Co., Limited, manufacturers of bed and horse blankets, mackinaws, kerseys, linings, sheetings and yarns, are at present under construction at an approximate cost of $200,000. The main mill is being enlarged by the erection of an extension, 140 x 100 feet, four storeys high. This building will be utilized for manufacturing and the company are installing additional cards, mules and looms. The second erection consists of a dyehouse, 80 x 84 feet, three storeys high, which is being equipped with the most up-to-date dyeing machinery. The additions will require the employment of a hundred new hands.

Larger Output for 1920

Re-organized Industry in Stratford Will Make Improvements to Increase Capacity

While no definite announcement will be made for a while yet, the McLagan Furniture Co., Limited, Stratford, under new management, will undoubtedly be extended to provide for a larger output in 1920. The company has recently been reorganized, the McLagan Estate having disposed of its interests in the George McLagan Furniture Co., Limited, and the Stratford Chair Co., Limited, to Toronto and Montreal financiers. It is now known as the McLagan Furniture Co., Limited, and controls not only the two Stratford industries, but the Meaford Manufacturing Co. as well. D. M. Wright is president and managing director; W. K. Trower, Montreal, vice-president; H. S. Robertson, secretary-treasurer, and R. S. Robertson and L. M. Green, Toronto, directors. Both Stratford plants are at present operating to the fullest capacity, the production of phonographs being steadily on the increase. The McLagan plant is one of the largest and best equipped plants of its kind in Canada. The Stratford Chair Co.'s plant is a four-story concrete building, containing 60,000 sq. feet of floor space.

More Storage Room

Addition to Plant of Dominion Sheet Metal Corporation Gives Much Needed Room

At their works in Hamilton, the Dominion Sheet Metal Corporation, Limited, have nearly completed a brick and stone addition, 50 x 140 feet and two storeys high. The ground floor will be used entirely as warehouse space to enable the company to carry a much larger stock of Premier galvanized sheets, while the second floor will be used for light storage and other purposes. Everything is prepared to add at some future appropriate time two additional storeys, the steel work being especially heavy on that account. The building is being equipped with elevator and mono-rail electric hoist of three ton capacity.

New Industry for N.B.

Manufacture of Hardwood Last Blocks to be Commenced on Large Scale by English Interests

A new and promising industry, that of the manufacture of hardwood last blocks, will soon be added to the industrial enterprises of New Brunswick. Mr. H. Mobbs of Kettering, England, has decided to locate a plant for this purpose at Mullin's Brook, near McGivney Junction, on the line of the

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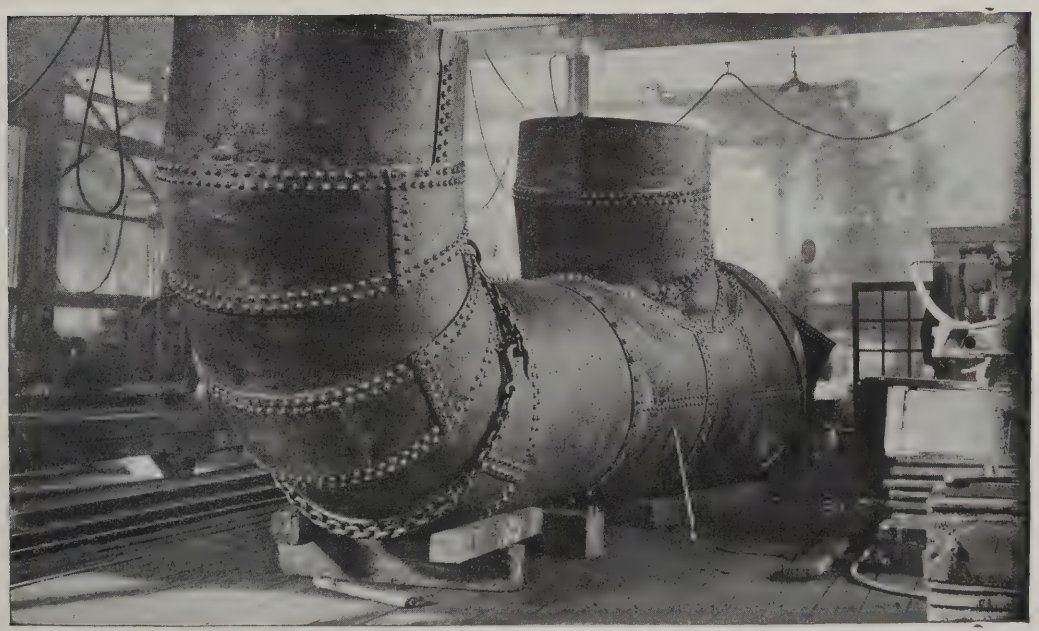
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Canadian National Railways. A mill, formerly in operation at Napadoggan, is being moved to Mullin's Brook and when erected will give employment to from one to two hundred men. An arrangement has been entered into with the Nashwaack Pulp & Paper Company, for the necessary supply of hardwood and it is expected that from three to four million feet of maple timber from the old Gibson limits will be manufactured yearly into last blocks. Mr. R. T. Baird is slated as manager of the new enterprise.

A Wire Rope Plant

Company Formed in British Columbia to Establish Industry on Granville Island, Vancouver

The Britannia Wire Rope Co., Ltd., with an authorized capital of $100,000, propose to establish a factory on Granville Island, Vancouver, for the manufacture of wire rope. Up to the present the large demand for wire rope in British Columbia has been supplied principally by rope imported from England and the United States. Exact information as to the requirements of logging and other industries in British Columbia depending on regular supplies so impressed a large British corporation which controls its own resources of raw materials, that the Britannia Wire Rope Company has been formed. The proposed site for this plant is eminently suitable for such an industry, having access both to rail and deep-water, which will greatly facilitate the handling of the output.

A New B.C. Industry

Manufacture of Soil Pipe to be Commenced in Former Plant of Robertson, Godson Co.

Colonel J. S. Tait, late Commander of the 29th (Vancouver) Battalion, is reported to have purchased the plant of the Vancouver Pipe & Foundry Co., Ltd. This plant was formerly operated by the Robertson Godson Co., but has not been working for the past six years. The foundry is now being equipped with all the necessary machinery and moulds to operate a ten-ton capacity cupola. Cast iron pipes and fittings as well as castings will be made in the new foundry. The manufacture of cast iron soil pipe is a new industry in British Columbia, there being no other similar industry in that province.

Doubling its Capacity

Dominion Forge and Stamping Co., Limited, are Making Important Plant Extension

The Dominion Forge & Stamping Co., Limited, Walkerville, are at present doubling the capacity of their board hammer shop and are installing a new 8,000-lb. steam hammer and a new 5-inch forging machine. The recent sale to the Ford Motor Co. of Canada of their frame and fender plants does not in any way affect the forge plant. The only difference will be that the company will devote their entire attention to the forging business and be in a better position to give efficient service.

Branch Plant for Peterboro

Nashua Gummed & Coated Paper Co. Preparing to Locate Canadian Plant in Peterboro

The Nashua Gummed & Coated Paper Company of Nashua, N.H., a well-known American firm of paper converters, have plans well advanced for the establishment of a branch factory at Peterborough, Ontario. This enterprise will occupy the plant recently owned by Stickney Motors, Limited, which has been purchased by the City of Peterborough and leased to the Nashua Company. The buildings are single storey brick

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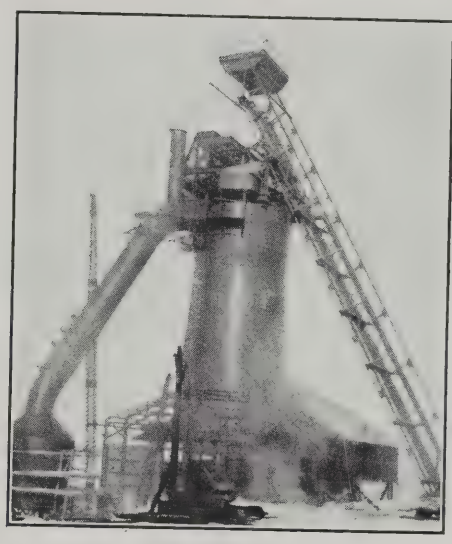
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mill construction, and have seventy thousand square feet of floor space. About thirty people will be employed initially. It is expected that operations will start during the coming January. The plant will be thoroughly equipped for the production of non-curling sheet gummed papers, cloth-lined papers, box stay, sealing tape, gummed cloth, and plain and printed waxed papers of all grades.

Confectionery Plant Extended

Bean & Westlake, Limited, Have Been Very Much Crowded for Room of Late

Owing to the pressure of expanding business, Bean & Westlake, Limited, are adding an extension, 21 x 70 feet, three storeys high, to their plant in Woodstock. It will not be completed until after the first of the year, but is being used to a certain extent. The new addition will increase floor space by about one-fourth and output by one-third, but will only give temporary relief. It is the intention of the company to erect another building in the near future.

Quebec Brewery Enlargement

La Brasserie Champlain, Limitee, Plan Extensions Increasing Their Capacity Largely

A programme of extension has been inaugurated by La Brasserie Champlain, Limitée, Que., which will increase capacity from 125 to 375 barrels per brew. At present a new cold storage building 172 x 46 feet, 4 storeys high, and with capacity of 60 vats of 5,000 gallons each, is under erection and will be completed by March 1. Next year a new bottling department, new power house and second brew house with capacity of 250 barrels per brew will be erected. The Company are manufacturing India Pale Ale, Pale Ale, Biere Blonde, Tip Top Beer, Biere Temperance and Porter.

Will Make Wire Cloth

Niagara Falls, Ont., the Site of a New Industry in Which American Capital is Interested

A plant is at present under construction at Niagara Falls, Ont., for the Niagara Wire Weaving Co., Limited, a new company in which Mr. Hamilton Lindsay, President of the Lindsay Wire Weaving Co., Cleveland, Ohio, is principally interested. The company are spending about $220,000 in plant and equipment, and will employ about 150 hands in the manufacture of wire cloth and wire-weaving machinery. The market for these products will be largely in Ontario and Quebec, they being used in pulp and paper mills and other industries.

Rubber Industry for Guelph

Northern Rubber Co., Limited, Expect to Get Going Early in the New Year

It is anticipated that the plant being erected in Guelph by the Northern Rubber Co., Limited, will be ready for operation early in 1920. It is a building, 80 x 200 feet, four storeys and basement, of reinforced concrete, and when equipped will have a capacity of 5,000 pairs of rubbers per day, and a payroll of about 500 hands. The company are capitalized at $500,000, half common and half preferred, and the present investment is about $250,000. F. E. Partridge, chief executive of the F. E. Partridge Rubber Co. is president; F. W. Kramer, formerly superintendent of the Dominion Rubber Co. factory at St. Jerome, is vice-president and superintendent, and A. F. Dwyer, formerly manager of the Maple Leaf Rubber Co., Port Dalhousie, is secretary-treasurer.

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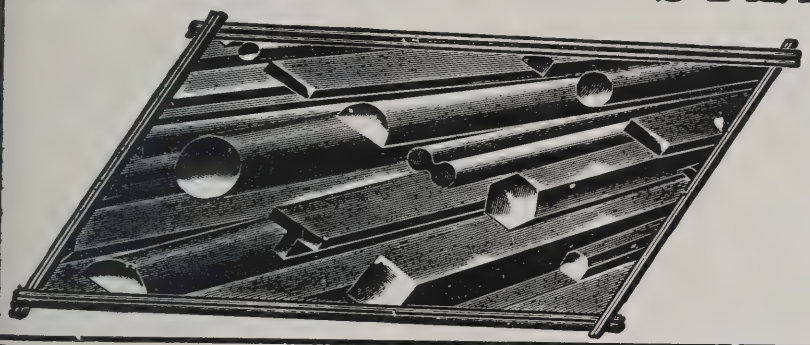
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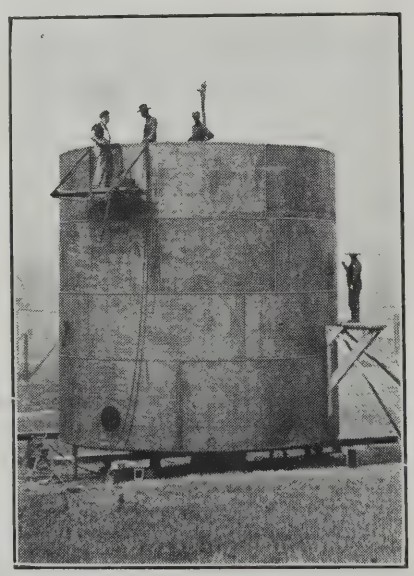
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St. Thomas Developments

Several New Industries Getting Started, Particularly in Musical Instrument Line

A new company, known as St. Thomas Cabinets, Limited, and capitalized at $100,000, has recently been formed in St. Thomas for the purpose of undertaking the manufacture of gramaphone cabinets and panels. They will occupy about 23,000 square feet of floor space in the Lawson E. Jones plant, formerly known as the Thomas Bros. plant, and expect to be producing about January 1. B. F. Honsinger is president; Jos. Bone, vice-president and manager; J. B. Woodhouse, secretary-treasurer; H. Woodhouse, A. A. Ingram and P. A. Honsinger, directors.

Provincial Machine & Supply Co., which was formed earlier in the year for the manufacture of gramaphone motors, tone-arms, cranks and metal parts, are now ready for production.

Hitch Bros. of Canada, Limited, have organized with Mr. A. J. Hitch as president and general manager, to manufacture a patent wall-paper hanger which bids fair to revolutionize the trade. They are capitalized at $50,000 and expect to start manufacturing in December.

A New Chemical Industry

Plant at Kitchener, Ont., Will Refine Medicinal Salts Secured from a Lake in Saskatchewan

Operations will begin very shortly on a fairly large scale at the plant of the Salts & Potash Co. of Canada, Limited, Kitchener, Ont. This company, formed last April, was the outcome of an investigation of the potentialities of chemical materials found in Maskaki or Houghton Lake, Saskatchewan. This lake contains about eight square miles of a substance known as astraknit, which in its crude form has no commercial value. Several years ago a few Canadians conceived the idea of having the raw material of the Lake analyzed and experiments were conducted from time to time by chemists in the United States and Canada. After the expenditure of considerable money, the project was declared to be commercially feasible and a lease was secured from the Dominion Government.

An evaporating plant has been installed at the Lake, this being of a modern and up-to-date design. A spur line has been run in from the Prince Albert branch of the G.T.P. and the evaporated salts will be shipped to Kitchener, where a refining plant has been established. The company have purchased a building suitable for the purpose from the Canadian Pyrofugout Flooring Co., and have applied the refining process to the building. For the first six months they will handle from 100 to 150 tons of crude salt from the lake per week. The product to be manufactured consists of epsom salts, glauber salts, magnesia carbonate, potassium chloride, potassium nitrates, potassium sulphate and medicinal salts, and the company expect to commercialize their product to the Canadian trade in a very short time. They have absolute faith in the success of their enterprise because through experiments and research they have demonstrated that the product soon to be offered will be superior in quality to anything heretofore marketed in Canada.

The directors are, A. J. Gough, Sellers-Gough Fur Co., Limited, Toronto; Richard Gough of the same firm; John

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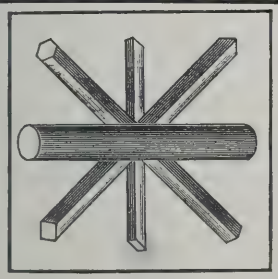
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Works: LONGUEUIL, QUE.

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Locomotive and Car Wheel Tires

HIGH SPEED and CARBON TOOL STEEL

Seitz, Canadian Branch Underwood Typewriter Co., Toronto; W. W. Sloan, Toronto; W. G. Weichel, ex-M.P., Waterloo; Jacob Klotz, Kitchener; C. Ide, Kitchener. Mr. Gough is president; Mr. Sloan, vice-president; Mr. Klotz, secretary-treasurer; Mr. James E. Day, Toronto, assistant secretary and solicitor; Mr. Weichel, managing director and Mr. C. Ide, production manager. Mr. C. W. Hancock, formerly connected with British Acetones, Limited, Toronto, is chemist.

The Dominion Glass Co., Limited, are at present carrying out their pre-war programme of doubling the capacity of their plant at Redcliff, Alta.

The Canadian Chicle Co., Limited, have sold their building in Peterborough to the Western Clock Co. and have taken over the property of the Lundy Shovel & Tool Co. One of the building is being remodelled to suit their purposes, and the balance, consisting of 20,000 ft. of floor space and an acre of land, will be sold or leased.

Eclipse Rubber Co., Limited, Montreal, have rented a building in Victoriaville, P.Q., and commenced the manufacture of waterproof clothing there, employing about 100 hands. Operations commenced about October 15, and so far results have proved satisfactory. If success continues the industry will be enlarged.

A new industry for Brantford is that of J. & J. Cash Inc: of Coventry, England, and South Norwalk, Conn., manufacturers of cotton labels, etc., who have secured space in the *Expositor* Building and will start operation about the beginning of the year with 25 hands. The business will be run in connection with the South Norwalk branch.

The General Phonograph Corporation, of New York, have bought out the plant of the Pollock Mfg. Co., Limited, Kitchener, and will continue the manufacture of phonograph motors, tonearms and reproducers.

About $300,000 is being expended by the Steel Company of Canada, Limited, on enlargements to their Montreal works. They are building crane runway, forge shop and new finishing and storage buildings in connection with their bolt and nut department, which will add materially to their capacity for production in these lines.

The Vancouver Sheet Metal Co. have recently moved into their new plant on Granville Island, Vancouver. This plant takes the place of that destroyed by fire some months ago in another part of Vancouver City, and the new factory is equipped with the latest machinery for turning out cornices, skylights, windows, kalanin doors, corrugated iron roofing, etc.

It has been found necessary to hold over until December a good deal of additional material about recent industrial developments. As already pointed out there is much activity at the present time and space is not available to refer to it all. The December number will contain supplementary information.

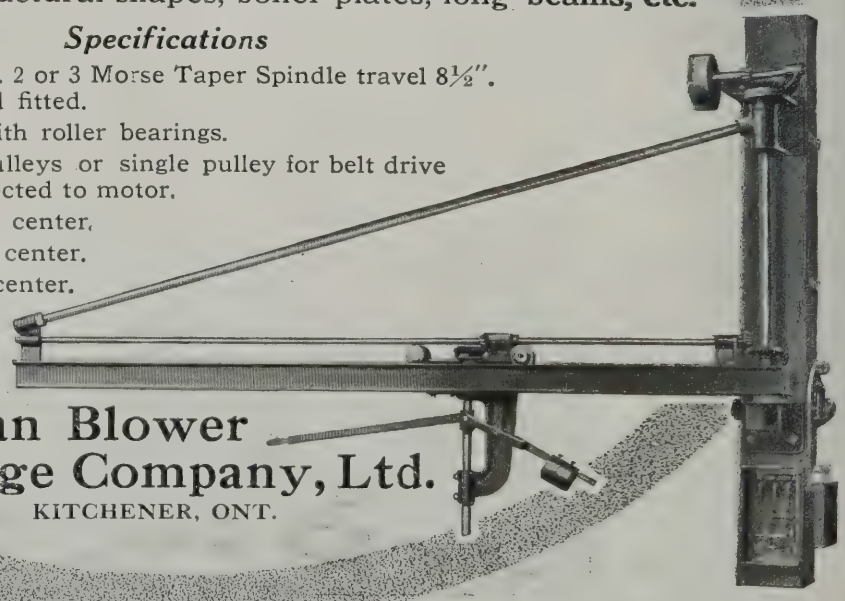
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14″ x 14″ tight and loose pulleys or single pulley for belt drive to motor, or direct connected to motor.
15 ft. beam will drill to 13′ 6″ center.
12 ft. beam will drill to 10′ 6″ center.
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MONTREAL COTTONS

LIMITED

MANUFACTURERS OF

WHITE VICTORIA LAWNS

WHITE NAINSOOKS

and

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OF EVERY DESCRIPTION

Vancouver Island's Resources

As Disclosed by the Exhibits at the Home Products Fair Recently Held at Victoria

By T. J. GOODLAKE
Secretary, Victoria and Vancouver Island Section, C.M.A.

THE exhibits shown at the Home Products Fair, which was held recently in the Hudson's Bay Building, Victoria, B.C., on the initiative of the Victoria and Island Development Association, were a revelation of the progress which has been made in the industrial and agricultural development of Vancouver Island. And no very active imagination is needed to envisage by their aid the vast commercial future which is opening up for this unique and richly endowed corner of the Dominion.

As in the minds of many, to whom the Pacific Coast is still *terra incognita*, there is some vagueness as to the geography of that region, it should be explained that Vancouver Island forms part of the Province of British Columbia, and the City of Victoria, which occupies the extreme southern tip of the Island, is the Capital of the Province. The Island is 278 miles long by 60 miles broad, and has an area of some eight and a half million acres. It is separated from the provincial mainland by a series of narrow channels widening into the Gulf of Georgia, and from the State of Washington by the Straits of Juan de Fuca.

While it consists partly of rocky and forested mountains, at least one million acres can be classified as arable land. Its shores are washed by the Japanese current (the Gulf Stream of the Pacific), so that the mildness and equability of the climate are favorable to fruit-raising, and this is extensively carried on, especially in the neighborhood of Victoria. The strawberry crop has become particularly in demand in the Prairie Provinces and co-operative marketing has enabled large and regular shipments to be made at profitable prices.

The coal deposits of the Island are estimated at over one billion tons. They are worked by a number of long-established collieries, whose product is second only in steam-raising qualities to Welsh coal. Other mining possibilities of the Island, particularly in iron and copper, are practically unlimited and await only capital and enterprise for their development.

The surrounding waters abound with many sorts of fish, including salmon, halibut, cod, herring, oolichan, salmon-trout, bass and others. The total salmon pack of the Island canneries approximates 200,000 cases, the greater part of which is exported to European markets. A clam cannery has been established for many years at Sidney.

The whaling industry, carried on by the Consolidated Whaling Corporation, has its headquarters at Victoria, and two of its four stations are situated on the Island. Some hundreds of the largest whales are caught annually. The products include oil, fertilizer, bone meal, and canned whale meat.

The forests of Vancouver Island are capable of producing annually over one billion feet of merchantable timber, of which about a quarter is the present estimated cut. The

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and other Cutting Tools. It means flawless materials, perfect workmanship, and a rigid factory inspection that rejects everything below the highest standard.—Buy tools by NAME—and choose the name "BUTTERFIELD."

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Through bills of lading issued to all points in Australia, New Zealand, Tasmania and other islands of Oceania.

Marine Insurance effected at rates equal to those given from New York.

For rates and other information apply to

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principal varieties are spruce, hemlock, Douglas fir, cedar and balsam. The chief markets are the Middle West of Canada, Europe, Australia, and South Africa.

Turning from the basic industries to the manufactures of finished product it was evident from an inspection of the Fair that successful concerns were already well established in many lines. These included notably paint, soap, mineral waters, biscuits, confectionery, condensed milk, pickles, preserves, coffee, extracts, vinegar, rice, oat and wheat products, macaroni, lace. There was also shown the output of a score of other industries in various stages of development.

A prominent stand was that of Yarrows, Ltd., of Esquimalt, whose exhibit included a model of a type of Indian shallow draft, stern-wheel steamers, of which several have been exported by the firm, and also a standard make of aeroplane which had been completely overhauled and rebuilt at the same plant.

Much credit is due to the officials of the Victoria and Island Development Association for the admirable organization of the Fair, and especially to the manager, Mr. George I. Warren. His energy was instrumental in attracting the dense crowds that thronged the building during the whole of the week that the Fair was open. The exhibition was honored by a visit from H.R.H. the Prince of Wales, who made a detailed and interested inspection of the stands.

Places for Disabled Men

An Appeal Being Made to Manufacturers to do Their Best to Supply Jobs for These Men

Information & Service Branch, Department of Soldiers' Civil Re-Establishment, has created a Special Department for placing disabled and maimed soldiers in employment and has opened offices at all the leading centres of Canada to give special attention to cases of this category. The first office has been opened at 287 Queen Street West, Toronto, phone Adel. 6530, and employers are earnestly requested to co-operate with the officials of the Department, as the placing of permanently disabled men and amputation cases has become a serious problem and must be faced. There are positions which these men can fill in your factory, store or office with 100 per cent. efficiency, such as watchmen, caretakers, janitors, clerks, chauffeurs, elevator men, etc. The Department can place a fit man who can do a full day's work, but the pressing problem at present is the placing of the man who cannot do a full day's work alongside a fit man and who becomes discouraged and quits. There is a place for such a man, and employers are asked to look over their lists for vacancies and communicate with this Department when needing men.

It is a duty to the Empire and will prove to be a strong factor in keeping down any unrest if these maimed men are provided for. If manufacturers do their utmost along these lines, the large number of unemployed disabled men will soon be taken care of. It is estimated there are between 400 and 500 such men in Toronto alone.

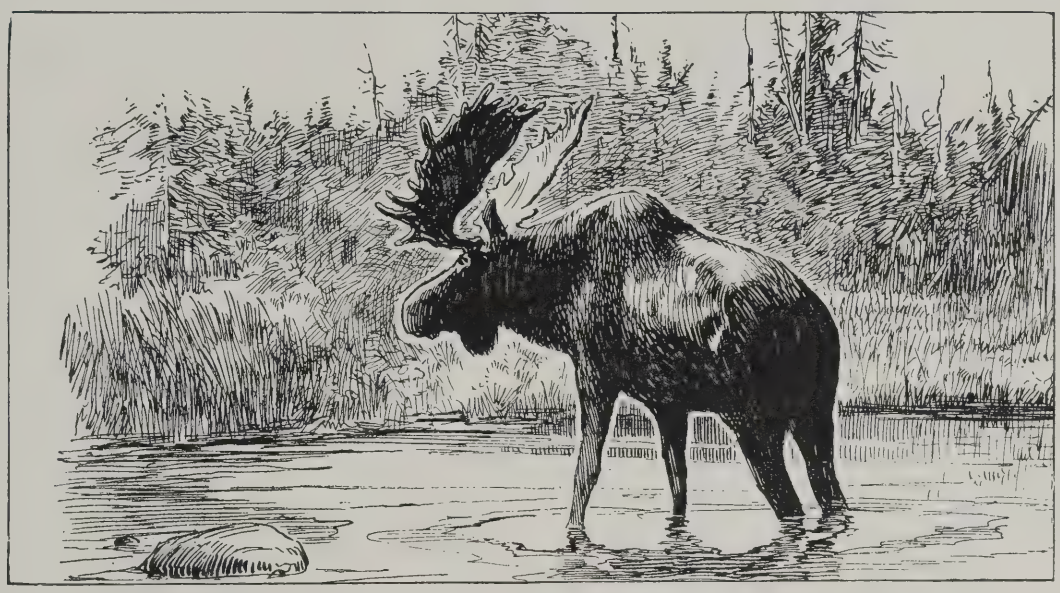
Offices have been opened by the Department at 186 Windsor Street, Montreal; 287 Queen Street West, Toronto; 115 Royal Bank Building, London; 610 Notre Dame Investment Building, Winnipeg; Board of Trade Building, Vancouver; 349 Barrington Street, Halifax.

CANADIAN COLLAPSIBLE TUBE CO., Limited

MANUFACTURERS OF

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The Call of The Open

WHEN the days begin to have that unmistakable fall "tang"---when you shiver more than a trifle if you leave your coat home nights---when the leaves are turning brown quicker than you can watch them---right then you feel that impulse to climb into that old khaki suit, to pull on those old knee boots, and to fondle that fine little old rifle---

AND to get up north where the big fellows are---moose, deer, caribou and bear, at your choice according to locality. Why not? The backwoods of Ontario are calling you to a real fall hunter's holiday.

AND it's so simple to get there. The Canadian Pacific takes you to all the best hunting country in Ontario. Ask any Canadian Pacific agent, or

W. B. HOWARD, DISTRICT PASSENGER AGENT
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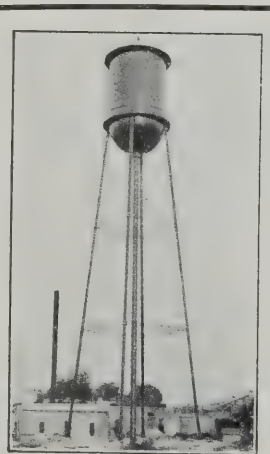
Regular monthly sailings from Montreal in Summer and St. John, N.B., in Winter, calling at Cape Town, Algoa Bay (Port Elizabeth), East London, Port Natal (Durban) and Delagoa Bay in the order named.

Sailings 20th of each month.

All steamers fitted with refrigerators for the carriage of perishable freight.

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Statement of Principles by U.S. Employers

(Continued from page 60)

out, a sharp distinction should be drawn between the employment relations in the field (*a*) of the private industry, (*b*) of the public utility service, and (*c*) of Government employment, Federal, State, or Municipal. In all three there are common rights and obligations, but in so far as the right to strike or lockout is concerned, the nature of the Government service and public utility operations requires that they should be considered from a somewhat different point of view than private industry.

In private industry the strike or the lockout is to be deplored; but the right to strike or lockout should not be denied as an ultimate resort after all possible means of adjustment have been exhausted. Both employers and employees should recognize the seriousness of such action and should be held to a high responsibility for the same.

The statement that the right to strike or lockout should not be denied does not cover the matter of the sympathetic strike or lockout, where for mere purposes of coercion there is a combination deliberately inflicting injury upon parties against whom the assailants have no grievance, for the purpose of accomplishing an ulterior result. The sympathetic strike is indefensible, anti-social, and immoral. The same may be said of the blacklist, the boycott, and also of the sympathetic lockout.

In public utility service the public interest and welfare must be the paramount and controlling consideration. Modern social life demands the uninterrupted and unimpaired operation of such service, upon which individuals and communities are as dependent as is human life on the uninterrupted circulation of the blood. The state should, therefore, impose such regulations as will assure continuous operation, at the same time providing adequate means for the prompt hearing and adjustment of complaints and disputes.

In Government employment the orderly and continuous administration of Governmental activities is imperative. A strike of Government employees is an attempt to prevent the operation of Government until the demands of such employees are granted, and cannot be tolerated. No public servant can obey two masters; he cannot divide his allegiance between the Government which he serves and a private organization which, under any circumstances, might obligate him to suspend his duties, or agree to assist him morally or financially if he does. Social self-defence demands that no combination to prevent the operation of Government be permitted. The right of Government employees to be heard and to secure just redress should be amply safeguarded.

12. *Training.*—Practical plans should be inaugurated in industry and outside of it for the training and up grading of industrial workers, their proper placement in industry, the adoption and adaptation of apprenticeship systems, the extension of vocational education, and such other adjustments of our educational system to the needs of industry as will prepare the worker for more effective and profitable service to society and to himself.

The foregoing is limited to a statement of principles. Only casual reference has been made to methods by which such principles may be carried into effect. The problems are so serious and difficult that such methods must be worked out by the individual establishments in conjunction with their employees and by industry as a whole.

Why Not Ship "Canadian National"?

Lines of the C.N.R. extend from Atlantic to Pacific through All Canadian Territory. They serve practically all of the important points in each of the nine provinces. They reach direct the important seaports.

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Use your own line. Instruct your shipper to route your consignments "C.N.R." The service will justify such action.

Get the "National" Idea

Canadian National Railways

Principal Agencies:—Halifax, N.S.; Moncton, N.B.; St. John' N.B.; Charlottetown, P.E.I.; Quebec, Que.; Montreal' Que.; Ottawa, Ont.; Toronto, Ont.; Port Arthur, Ont.; Winnipeg, Man.; Regina, Sask.; Saskatoon, Sask.; Prince Albert, Sask.; Edmonton, Alta.; Calgary, Alta.; Kamloops, B.C.; New Westminster, B.C.; Vancouver, B.C.; Victoria, B.C.

Recent Trade Enquiries

A List of Enquiries Received from Various Sources including the Canadian Trade Mission, London; the Canadian Trade Commission, Ottawa; the Department of Trade and Commerce, Ottawa; and the Commercial Intelligence Department, C.M.A., Toronto.

DOMESTIC TRADE ENQUIRIES.

171. Toronto.—A newly established Canadian firm of manufacturers' agents, with sales offices at Halifax, Montreal, Ottawa, Toronto, Winnipeg and Vancouver, wish to secure agencies for Canadian products. The members of this firm have considerable overseas service and some of them know the English market and export and import trade thoroughly. They are in an excellent position to place Canadian products in foreign countries.
172. Quebec.—A Canadian agent, who has been in the hardware business for the last fifteen years and has a good connection amongst all the hardware trade in Quebec, wishes to secure an agency for a line of electrical specialties in that Province.
173. Vancouver.—A reliable firm of selling and purchasing agents in Vancouver asks to be put in touch with Toronto manufacturers looking for representation in British Columbia.
174. Copra Crushing Machinery.—A Canadian firm wishes to get into communication with a manufacturer who can supply photographs, sketches, designs and requirements of copra crushing machinery (used for crushing dry cocoanut meat).
175. Toys.—A Toronto firm of good standing is desirous of getting in touch with local toy manufacturers with the idea of representing them. Being in the toy business themselves, they intend to continue manufacturing and at the same time represent and market other manufacturers' lines.

FOREIGN TRADE ENQUIRIES.

176. Export to Norway.—A gentleman who is a member of a well recommended Norwegian firm is looking for agencies of Canadian goods suitable for export to Norway. He will be in Canada until the end of November, and will arrange to call on seriously interested manufacturers.
177. Merchant Bar Iron.—A London firm wish to get in touch with Canadian manufacturers of merchant bar iron.
178. Cottons and other Goods.—A London firm interested in the import of all classes of goods from Canada, but particularly cottons, wish to get in touch with Canadian shippers.
179. Paper.—A Glasgow firm who are buyers for one of the largest paper distributors of India, in addition to having an extensive home trade, ask for quotations on all classes of paper, specially news printings and cream laids, quantities 50 tons at a time.
180. Weaving Wire.—A Glasgow firm ask to be placed in touch with exporters of mild steel galvanized and iron weaving wire suitable for making wire gauze.
181. Electric Welding Wire.—A Glasgow firm ask to be placed in touch with exporters of the above.
182. Hairpin Wire.—A Glasgow firm is in the market for the above.
183. Weaving Wire.—A Glasgow firm makes inquiry for the above.
184. Tinned Mattress Wire.—A Glasgow firm asks to be placed in touch with exporters of the above.
185. Wire Rods.—A Glasgow firm is in the market for the above.
186. Woollen Goods, Furs, Etc.—A London firm of manufacturers' agents, importers and exporters, are desirous of securing the agencies for Canadian manufacturers of woollen goods, furs, jewellery, watches, optical goods, and leather goods.
187. Automobile Accessories.—A Glasgow firm ask to be placed in communication with exporters of automobile lamps, tires, plugs, mechanical and electrical horns, etc.
188. Wire Nails.—A Glasgow firm who have branches in India and Australia ask for sources of supply of the above, with a view to arranging export to these countries.
189. Sheet Steel, Etc.—A Glasgow firm, who have branches in India and Australia, ask for sources of supply of the above, with a view to arranging export to these countries.
190. Confectionery.—A Glasgow firm who have already placed large orders for assorted chocolates with Canada would like to hear from exporters of white peppermint creams, penny or twopenny confectioners' novelties, cream caramels, marshmallows, etc.
191 Asbestos Woven Cloth.—A Stirling firm makes enquiry as to the possibility of securing supplies of the above from Canada.
192. Weaving Wire.—A Glasgow firm are in the market for soft mild steel weaving wires in white annealed tinned and galvanized qualities, in sizes from 20 W.G. to 40 S.W.G., .0048 diameter.
193. China.—We have an enquiry from a gentleman who states that he has lived in China for five years and who desires to return as the direct representative of some Canadian manufacturer. He has served as Chinese interpreter with the British Army in France. His references are good.
194. Rotterdam.—An agent in Rotterdam desires to be put in touch with Canadian suppliers of copper, chemicals, leather, lime, marble, mica, oils and pulp.
195. Automobiles and Accessories.—A gentleman well known in the motor trade in England wishes to secure agencies for Canadian automobiles and accessories.
196. Belgium, Bohemia and Central Europe.—An agent, well connected on the continent, wishes agencies and quotations for Belgium, Bohemia and Central Europe from Canadian firms who can supply the following: Bicycle saddles and chains, agricultural machinery, raw material of all kinds, tinned meat and fish.
197. Hardware.—A gentleman in London, with good connection and references, asked to be placed in communication with Canadian hardware manufacturers with a view to securing agencies for London.
198. Hardware and Manufactured Goods.—A reliable London firm asks to be put in touch with leading Canadian firms to whom they could submit detailed requirements and obtain catalogues and samples of their productions.
199. Italy.—An Italian firm who are agents for an old established and well-known London firm asks to be put in touch with Canadian firms who can export the following articles: Agricultural machines of all qualities, lime phosphates, and fish, dry and salted.
200. Bermuda and the West Indies.—A Canadian, manufacturers' agent, well recommended, is leaving at the beginning of November for Bermuda, the British West Indies and South America, and desires to get in touch with any Canadian manufacturers who would be disposed to take advantage of this opportunity to promote the sale of their products. France, Spain, and Central and South America.
201. A Canadian, 31 years of age, who knows English, Spanish, French and Portuguese well, and who now holds an important secretarial post with the Leopoldina Railway, the largest British owned railway in Brazil, is desirous of getting in touch with manufacturers who are considering representation in France, Spain or Central and South America. This gentleman has been for several years in Porto Rico and the Spanish West Indies and is highly recommended.
202. Geneva, Italy.—A firm in Geneva, Italy, desires to secure the names and addresses of Canadian firms who are in a position to export the following articles: Chemicals, minerals, fabrics, lumber, iron and steel.
203. South Africa.—A South African firm is interested in the following articles: Wheel material, i.e., elm naves sizes, from 6 x 8 to 9 x 10; hickory spokes from 1½ inches to 2 inches; hickory rims from 1½ inches x 1½ inches x 2 ft. 6 inches to 2¼ inches x 2¼ inches x 4 ft. 6 inches, including all intermediate widths, depths and heights. Trimming hides for upholstering carts and motor cars; leather cloth similar to rexine, pegamoid or moroccoline, cheap to good quality in 54-inch and 60-inch widths. Hood material 72-inch widths waterproof and also similar kind of material for cushion covers; household enamelware and lumber, including pine shelving, carpenters clear in half inch and 1 inch x 12 inch to 16 inches x 12 inches and up.
204. Oil Stoves.—A Liverpool firm is prepared to place large orders for the above, for which a strong demand exists.
205. Pianos.—A Liverpool firm asks to be placed in touch with exporters of the above.
206. White Powdered Arsenic.—A Liverpool firm asks to be placed in touch with exporters of the above.
207. Ochres.—A Liverpool firm asks to be placed in touch with exporters of ochres.
208. Mattress Wire.—A Liverpool firm are open to purchase the above 23-gauge mainly.
209. Maple Flooring.—A Liverpool firm asks for offers of 100,000 feet of the above, 1 inch x 4½ inch, finishing 13-16 inches x 4 inches face, planed, tongued and grooved.
210. Antwerp.—A firm in Antwerp desires to be put in touch with Canadian manufacturers of the following: Chocolate, sugar, condensed milk, and flour. They are in a position to place large quantities, having regular requests on the subject.
211. Swansea.—A British Company, which does a trade with the wholesale and retail confectioners, grocers and chemists, is specially interested in securing the representation of some Canadian factory which can supply chocolates, gums, lozenge and compressed lozenge tablets, in bulk or packed.
212. Alsace-Lorraine.—A correspondent, highly recommended, is anxious to obtain the representation for the Alsatian Provinces of lines of Canadian food products. He states that food products are not represented to any extent in Alsace, and the fact of starting an export trade in these lines would surely lead to enquiries for other Canadian products. He is willing to put himself entirely at the disposition of these firms under whatever mode of payment they have in mind, and would be pleased to receive samples and prices plus rate of exchange f.o.b. of the following: Meats, smoked ham and shoulders, smoked sausages, etc.
213. Spain.—A correspondent who expects to sail for Spain shortly and to remain there for six weeks or more desires to be intrusted with some commission in that country. He is experienced in commercial matters, and is able to prepare trade reports and statistics.
214. Belgium.—A commission agent in Belgium who has had twenty years' experience in exporting to Africa, wishes to get in touch with Canadian firms who can supply the following: Enamelled products; cotton tissues and mixed cloth, including ready-made clothes, shirts, vests and cotton jackets intended for negro workmen. These goods were formerly supplied to the Congo by Germany.
215.—Belgium.—A correspondent in Brussels asks to be put in touch with leading Canadian firms manufacturing bookbinding machines, machines for the manufacture of office furniture, pencils, penholders and fountain pens.
216.—Foodstuffs, Linseed Meal.—A firm in Christiania asks to be put in touch with Canadian exporters of the above.
217. Electrical Machinery.—A firm in Milan, Italy, wishes to get in communication with Canadian exporters of the following: Motor engines, dynamos, transformers, voltameters, ampermeters and insulators.

INDUSTRIAL CANADA

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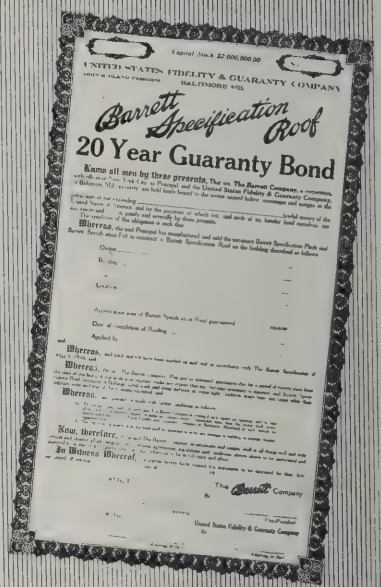
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Industrial Canada

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The Canadian Manufacturers Association
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Editorial Comment

Wild Theories at the International Labor Conference

ONE of the Italian delegates at the International Labor Conference at Washington suggested that all raw material in the world should be pooled and placed under the jurisdiction of some international body, who would distribute it to the various countries according to their needs. As Italy is notoriously short of raw materials, there was considerable wisdom in his proposal from his country's point of view, but the nations which are plentifully supplied with raw material did not receive it with enthusiasm.

An English delegate claimed that the institution of private property was the primary cause of unemployment, and that, therefore, all private property should be abolished. This proposal was rejected by the other labor delegates, who, apparently, had some private property of their own.

Unemployment at the Labor Conference

THE Labor delegates at the International Labor Conference seemed determined to force the acceptance of some international arrangement by which the unemployed would be placed on the pay-roll of their respective countries indefinitely. Unemployment pay brought disastrous results in Great Britain, and it is significant that it is being dropped. In most cases unemployment pay is an invitation to stop working. The introduction of any system of unemployment pay or insurance would be particularly unfortunate in Canada. Here our problem is not to provide for unemployment, but to secure enough people to do the work which is waiting to be done. Before the war we were securing at great expense immigration at the rate of about half a million a year. In normal times there is always a shortage of labor in Canada. As a general rule, anyone who wants work, and will accept the kind of work available rather than remain idle, need not be idle. At intervals of seven to ten years in our history there have been periods of depression when there was unemployment for a few months, but in these cases special measures were taken which were as satisfactory as any that could be devised under the circumstances. Even in periods of depression in Canada it was found that a great proportion of the unemployed were people who should never have left the farms, and were attracted to the city by the hope of getting easier work at higher pay and enjoying the excitement of city life. The rapidity with which Canadian industry and agriculture absorbed the Canadian army is sufficient proof that Canada has nothing to fear from the spectre of unemployment.

The surest way to create unemployment is to bonus it.

Asking for Something Every Year

IN addressing the International Labor Conference at Washington, the Right Honorable George N. Barnes, representative of the British Government, made the following observations:—

> "My labor folks—and I regard myself, too, as being a labor man, although I happen by the accident of time to be a Government representative—my labor colleagues and comrades will think I have been somewhat moderate and modest in my proposals. If so, I would say to them that this conference is not the last conference. It is the first one. I would say to them that what we cannot do this year, we may do next year, or the year after."

Mr. Barnes states very concisely the attitude of labor towards these annual international labor conferences. They propose to come to them year after year always asking for more. It is necessary that employers should understand that the labor sections of the Peace Treaty were incorporated in the Peace Treaty by the direct action of those Governments which have partially surrendered themselves to labor. The International Labor Conference will tend to become a gigantic machine for propagating theories, which will injure both employees and employers. In any case it will furnish the means by which a constant agitation will be maintained; and the primary objects of this agitation will be to shorten the hours of work unduly, to increase wages beyond economic limits, to advocate the extension of various kinds of compensation and insurance

schemes, and in general to continue increasing the cost of living. As a general rule, employers want to treat those who are working for them fairly. They know that men and women work better when their hours are not too long, when they are well paid, and when they secure recognition for individual capacity. But employers are in a constant state of uncertainty because they do not know where the demands of their employees are leading. If they ask a forty-four hour week to-day, what will they ask next year and the year after? The coal miners of the United States struck for a thirty-hour week, and the whole North American continent is suffering as a result. If employees would make reasonable requests, abide by them for say a period of ten years, and undertake financial responsibility for breaking agreements, they would find employers ready to meet them more than half way.

Mr. Parsons on the Eight-hour Day

AS a delegate representing all the employers of Canada at the International Labor Conference at Washington, Mr. S. R. Parsons, of Toronto, has been guided by the resolution regarding the eight-hour day passed by the employer delegates at the National Industrial Conference in Ottawa last September.

In voting against the draft international agreement at the Washington Conference Mr. Parsons made the following statement:—

"I beg to make a short statement on behalf of myself and those whom I represent, the Canadian employers, in connection with this report which is now before the conference, and I may say I will hand a copy of this to the translator afterwards so that he can read it in full. In speaking for Canadian employers, many of whom have been consulted since this conference was in session, I beg to state as follows:

"1. While in many industries the eight-hour day is already in operation, especially in the building trades and in manufacturing, where the work is laborious, yet the general application of the shorter working day would, according to actual experience, greatly lessen total production.

"2. At the present time when the Government of the country is calling upon manufacturers to increase their output and exports in order to meet heavy national obligations, nothing should be done which would tend to hinder them in their efforts.

"3. Only by increased production can the cost of living be reduced to all classes. To ignore this fundamental truth is to blind our eyes to actual facts.

"4. While having regard to world-wide interests, it must be remembered that Canada is a young and undeveloped country. To attempt to put her upon the same footing as old world countries with entirely different conditions is like placing a young and vigorous giant on the same footing as a man advanced in life. We should have the opportunity of living our own life and managing our own affairs to suit our circumstances. If we can achieve more than others as a nation it is surely not only our privilege but our duty to do so. Why should our national life and development be dwarfed? An ancient philosopher has well said, 'That which is not good for the beehive can not be good for the bee.' Compulsory reduction of hours militates against establishment of new and small industries, and if the workman is to be hampered in his effort to rise a serious blow is struck at the national life of a young and rapidly developing country.

"5. An attempt was made in the eight-hour day committee of this conference to include in the draft convention all purely commercial undertakings, such as wholesale and retail stores, banks, etc. This proposition did not carry a majority in favor of it but will be considered again at a later conference. It has also been announced that agriculture has already been included in the programme of some countries proposing to come under this legislation. Evidently what is aimed at ultimately is an attempt to drive all the workers of the world like a flock of sheep into the eight-hour pen, regardless of the world's requirements. It is not suggested for a moment that the general acceptance of the eight-hour day will settle now or permanently our social and industrial problems, including hours of work.

"6. Under the proposed legislation Governments will be called upon to deal with economic questions to a much greater extent than ever before. It is quite conceivable that influences are likely to be brought to bear upon politicians from one direction or another in connection with such legislation and the administration thereof which would not make for national soundness or prosperity. There is much truth in the statement 'that Government is best which governs least.'

"7. Employers of Canada, representing all employing classes, at a national industrial conference in the city of Ottawa in September last, considered this question and agreed unanimously in a resolution calling upon the Government to appoint a commission on which employers and employees should be represented, to study the possible application of the eight-hour day to all branches of industry. If it can be demonstrated after such study, that the eight-hour day is sound economically as applied to Canada, and in the interest of all classes, including the workers, I feel safe in saying that the manufacturers—and I believe also the employers generally—will be glad to co-operate in bringing it into being. Meantime I have no option but to oppose the legislation as per draft convention before this conference.

"8. It is generally recognized that unless the United States accepts similar legislation, it would be placing an unfair burden upon Canadian employers, and the country at large, to be bound by the terms of the proposed convention."

Mr. Parsons stood firmly in support of the necessity of increasing production, in the face of the present international shortage of almost all products.

"What labor wants," said Hon. Mr. Barnes, a labor minister in the British Cabinet, during the Conference, "is more leisure."

Mr. Parsons thought that the world needs goods of every kind more than labor needs leisure.

Greater production means more food, clothing, houses, fuel, and other necessities for every one. Consequently, we should be advocating longer instead of shorter hours of work for every one till the crisis is past.

"A Canadian Tariff."

FOR two hundred years the fiscal policies of civilized countries have been divided into three classes, each class being founded on the theory of a school of political economy.

There are the "Protectionists," who believe that the industry of a country should be "protected" against undue foreign competition by means of a tariff, which should be regulated on various articles so as to allow home industries to develop.

Second, there is the "tariff for revenue" school, which advocates that a fairly uniform tariff should be levied on imports for the purpose of raising national revenues, and without special concern for the protection of any industry.

Third, there are the "Free Traders," who say that there should be no tariff on any imports, that all national industry should be fully exposed to foreign competition, and that national revenues should be raised by other forms of taxation.

Economic and political conflicts have raged about these three schools of fiscal thought for two centuries, and nations have either taken one of the above policies or compromised with features of two or even three of them.

In the coming revision of the Canadian tariff, the old controversies as to the respective merits of the above fiscal policies will doubtless be revived, unless a new course is followed.

What is our national fiscal problem? Is it not threefold: to raise revenue, to develop the country, and to supply the needs of its inhabitants?

Can we unite our energies in the task of framing "A Canadian Tariff"—that is, a tariff which will assist in the task of developing Canada as a great country within the British Empire?

Canada's Depreciated Dollar.

IN itself a decline in the exchange value of a country's currency need not be regarded as an evil. Depreciation in its unit of circulation in the markets of another country, by working as a deterrent to foreign buying and by encouraging home production and export trade, may be considered as actually a benefit. On the other hand, a depreciated currency is a symptom of a state of affairs that no self-respecting nation should view with equanimity.

So far as Canada is concerned, the depreciation of our dollar in New York, through the money markets of which practically all our financial transactions with the rest of the world are carried on, has come about largely through the creation of an adverse trade balance with the United States. This adverse balance for the last fiscal year amounted to something like $272,504,220, coupled with which was the necessity of transferring large cash balances to meet the interest charges on Canadian securities held by United States citizens.

Obviously the discount on our dollar can only be eliminated in one way and that is by wiping out the unfavorable trade balance. By buying less from and selling more to the United States this desirable result can undoubtedly be achieved. It should become the duty of all producers, and particularly Canadian manufacturers, to increase their output to such an extent that not only will domestic requirements be more completely met but the surplus for export be largely augmented. With the tremendous burden of the war and post-war debt on the nation's shoulders, there should be every incentive to convert an adverse into a favorable trade balance and thereby bring it about that the foreign buyer will become a contributor to the liquidation of our obligation.

Through the medium of house organs and bulletins, manufacturers might very well bring this situation to the attention of their workpeople. The Ford Motor Co. of Canada have done so very effectively in their *Ford News*, a "Trade in Canada" edition of which was recently issued. Not only did the company show how they were doing their part in buying every possible piece of material in Canada but they urged editorially the necessity for greater production.

"During the coming fiscal year," they stated, "the interest payable on Canada's Federal debt will be at least $115,000,000 and, in addition, for many years to come, an annual charge of $30,000,000 to $40,000,000 will have to be provided for her soldiers and the dependents of those who have fallen. To meet these extra charges and at the same time provide for carrying on the ordinary administration of public affairs demands the whole energy of the people of the Dominion. An adverse balance of trade is a condition which it is imperative to guard against. Instead of importing, Canada must export. Her factories must run full time every week in the year; the farmer must continue to speed up his production; he is the backbone of Canada and must not fail her. The vast mineral resources of the Dominion must be exploited to the utmost and the unprofitable conflict between Capital and Labor must give way to a broad spirit of understanding and co-operation. The responsibility for the commercial success of the country rests with the individual man, woman and child. No matter how small or menial the task, its conscientious execution by the worker adds just that much to the total effort which must be made by the people to place the country on a sound and prosperous footing.

"Everyone must do his bit, and do it well. To sit back and rely upon the other fellow to do the work is to invite disaster. Each must bend his or her energy to the task in hand. Your success depends upon the prosperity of the country and vice versa the prosperity of the country depends upon your success. There is, and can be, no time or place for the slacker in the strenuous years that lie ahead. Set the good example yourself, individually. In the new era that is opening up men are getting to realize that they are indeed their brother's keeper and that the time has now come when each one is in duty bound to shoulder his due share of responsibility for the success of the community."

The Necessity for Greater Production.

PRODUCTION in Canada is falling off. It has been falling off for some time. There is no way of arriving at accurate statistics which would cover the situation all over the country. But it is a fact that the aggregate output of all the factories of Canada is considerably below normal. What are the reasons? They are difficult to define accurately, but it is certain that one fallacy at least is being disproved. That fallacy is the belief that factories as a general rule can produce as much in a forty-four hour week as they can in a fifty-four or sixty-hour week.

As a result of the eight-hour day law, passed in France early last spring, the national factory output of France has fallen in almost direct proportion to the percentage of reduction in working hours. During the past year there has been a considerable reduction in the gross working hours of Canadian factories, and now we know that there has been a corresponding reduction in output.

More serious still, the production per hour even of the actual existing working hours, is below normal. As a

result we are losing orders every day because we cannot deliver the goods.

There is also another very important point to be considered in regard to output. It is difficult to keep the quality of materials up to the old standard. Workers do not seem to be showing the same interest in trying to put their best efforts into their work as they showed some years ago. The result is that if production is falling and the quality of the output tends to deteriorate, and if these two conditions continue and increase, a serious economic situation will be created.

We are told also that agricultural production has fallen off. We have not the best facilities for investigating the truth of these rumors, and prefer to leave their verification either to the Government or to the associations which represent agriculturists. Government statistics usually appear a year or so after their collection. Consequently, they are not much use when conditions of the moment require to be analysed.

Since the Armistice, Canada has had the greatest trade opportunity in her history. It is doubtful if such another opportunity will occur. The situation has been unique. Highly industrialized Europe before the war produced practically all the manufactured goods it needed and exported in great quantities. Europe also supplies the greater part of its own agricultural needs. The war has changed all this. Europe wants all kinds of manufactured goods in great quantities. Europe also wants vast quantities of agricultural products. We can sell nearly everything we can send to Europe. What an opportunity! If we can supply this demand we shall lay the foundation for Canada's financial greatness. Money will come into the country in vast amounts and will be circulated here through all classes of the community. Is there any problem in Canada at the present time greater than the necessity of producing everything which the country can produce in the greatest possible quantities and of the very best quality for sale abroad?

Water Powers of B.C.

IN these days when the utilization of water-power in industry is becoming of steadily increasing importance and when knowledge of the resources of the Dominion in this particular must be regarded as of the utmost value, the work of the Conservation Commission in making a comprehensive survey of the whole situation merits the warmest commendation. This is apropos of the recent publication by the Commission of "Water Powers of British Columbia," a volume characterized by minute attention to detail and thoroughgoing study of the entire field. It is the work of Mr. Arthur V. White, consulting engineer for the Commission, assisted by Mr. Charles J. Vick, and extends to 644 pages of explanatory and statistical material, calculated to give any one interested in the subject the maximum of available information.

The undertaking of Mr. White and his associate is so broad in scope and intimate in detail that it would be impossible to give even a faint idea of the contents of the volume. Suffice it to say that there is no phase of the subject that has not received attention. To the manufacturer or promoter the value of the work will be found to lie in the very clearly arranged tables describing the water-powers of the province, giving their location, their head and their estimated horse-power. This, in addition to information regarding legislation passed by the province on the subject of water-power, will be of the utmost value to anyone desirous of investigating power possibilities in the coast province.

Newspapers and Democracy

THERE are many newspapers in Canada which are advocating what they call "democracy in industry."

A newspaper is a manufacturing plant organized in the same way as a factory is organized. We do not know of a single instance in which any newspaper has attempted to show in practice what it means by democracy in industry. We would like to see some of the great newspapers make the attempt, but up to the present time they prefer to give the advice and to let other manufacturers than themselves make the experiments.

Certain newspapers have also given very wide publicity to charges of alleged profiteering on the part of manufacturers. Yet we understand that certain newspapers in Canada have made good profits during the past five years, have paid very handsome dividends, and are, in fact, extremely successful manufacturing enterprises. The public would like to see some of these newspaper manufacturers demonstrate in their own plants the theories which they are advocating.

The United States Rejects the Peace Treaty

THE Senate of the United States, on November 19th, 1919, rejected the Peace Treaty of Versailles and the League of Nations Covenant. By this action the United States not only refused to accept the political principles involved, but they also rejected the labor clauses of the Peace Treaty.

It is difficult to see how the International Labor Conference, now sitting at its first session in Washington, can make international regulations in regard to labor if the United States is not to be included therein. If, for example, the countries which decide to remain in the League of Nations agree that a forty-eight hour week should be made international, the United States, which does not limit the hours of work in this manner, would immediately have an enormous advantage in international trade over the other countries who had voluntarily restricted their hours of labor, or, in other words, their production. Canada is particularly interested, as it would be difficult for us to compete with the United States under such conditions.

The First International Labor Conference

History of the Steps Leading Up to the Holding of the Conference—Draft Convention on the Eight-Hour Day—Position of the Canadian Employers on the Inportant Question Presented by Mr. S. R. Parsons

By J. T. STIRRETT

General Secretary, Canadian Manufacturers' Association

AT the Plenary Sitting of the Peace Conference of the 11th April, 1919, the following Resolution was adopted:

> "That the Conference approves the Draft Convention creating a permanent organization for the promotion of the international regulation of labor conditions which has been submitted by the Labor Commission, with the amendments proposed by the British Delegation; instructs the Secretariat to request the Governments concerned to nominate forthwith their representatives on the Organizing Committee for the October Conference, and authorizes that Committee to proceed at once with its work."

It was decided to hold the first International Labor Conference in Washington, D.C., on October 29th, 1919. Each country was invited to send four delegates, two representing the Government, one representing employers and one representing labor.

The Organizing Committee, assembled under authority of the foregoing resolution in accordance with the provisions of Part XIII of the Peace Treaty, issued a circular and series of questionnaires dealing with the items of the agenda specified in the Treaty. The information contained in the replies to the questionnaire from the different Governments was analyzed and summarized by the Organizing Committee and presented in the form of reports to the International Labor Conference.

Owing to the fact that the United States had not ratified the Peace Treaty, no official delegates represented the United States at the Conference. The delegates from Canada were as follows:

(*a*) Government:
Hon. Gideon D. Robertson, Minister of Labor.
Hon. Newton W. Rowell, President of the Council.

(*b*) Employers:
Mr. S. R. Parsons, British American Oil Co., Ltd., Toronto.

(*c*) Labor:
Mr. P. M. Draper, Secretary of the Dominion Trades and Labor Congress, Ottawa.

When the Conference opened in Washington on October 29th, delegates were present from the following countries: Argentina, Belgium, Canada, Chile, China, Cuba, Czecho-Slovakia, Ecuador, France, Great Britain, Greece, Holland, India, Italy, Japan, Guatemala, Nicaragua, Norway, Paraguay, Peru, Portugal, Poland, Roumania, San Domingo, Siam, Spain, South Africa, Sweden, Switzerland, Uruguay and Venezuela.

The subjects on the agenda of the Conference were as follows:

1. Application of the principle of the eight hours' day or 48 hours' week.
2. The question of preventing or providing against unemployment.
3. Women's employment.
4. Employment of children.
5. Extension and application of the International Convention adopted at Berne in 1906 for the prohibition of the use of white phosphorus in the manufacture of matches.

Canada was principally concerned in the first two items of the above agenda.

The eight-hour day was one of the subjects discussed at the National Industrial Conference, Ottawa, September 15th-20th, 1919, and the following resolutions were passed and recorded by the three groups of delegates present:

Resolution submitted by the Employers' Group:

"Resolved that appropriate Government Commission, composed of an equal representation of employers and employees of the various industrial, producing and distributing industries, should be appointed to undertake investigations as to the adaptability of the hours of labor principles of the Peace Treaty to the different industries of the country, and to report as early as possible."

Resolution submitted by the Employees' Group:

"That we agree with the recommendations and findings of the Royal Commission on Industrial Relations, and urge the adoption of an eight-hour day by law throughout the Dominion, with due regard and recognition of the Saturday half-holiday, where same prevails and its possible extension.

"In industries subjected to seasonal and climatic conditions, such as farming, fishing and logging, if it can be established by investigation that the operation of such law is impracticable, then exemption shall be granted such industries from the operation of such law."

Resolution submitted by the Third Group (representing the public):

"We approve of the principle regarding employment and hours of labor set forth in the Treaty of Peace and in paragraphs 50 to 53 inclusive, of the Report of the Royal Commission, and would recommend that the Governments of Canada enact legislation providing for such in all industries where it is now established by agreement, at the earliest opportunity, and after due investigation by a Commission, composed of representatives of Employers and Employees representing the various industries, legislation be enacted by the Governments of Canada providing for the same to be extended in all industries where it can be applied, having due regard to the curtailment of production and distribution."

Mr. Parsons, the delegate representing the employers of Canada, announced early in the sessions of the Conference, that he would be guided by the resolution adopted by the employer delegates at the National Industrial Conference.

Draft Convention

The Organizing Committee of the International Labor Conference prepared a Draft Convention (agreement) to limit the hours of work in industrial undertakings to 48 hours in the week. The Committee suggested that this agreement should be brought into operation generally on July 1st, 1921. This draft agreement was submitted to the Conference, and after the views of Government, employers and Labor delegates had been stated, it was referred with various amending suggestions to a committee of fifteen. The Draft Agreement follows:

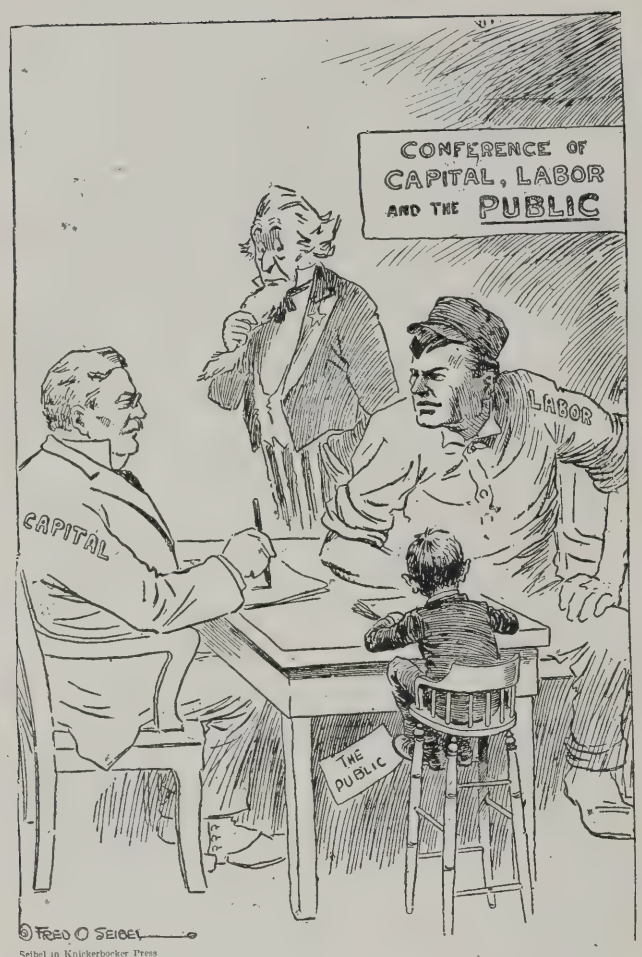
Draft of a Convention to Limit the Hours of Work in Industrial Undertakings to Forty-eight in the Week.

1. The present Convention applies to all industrial undertakings, other than undertakings in which only the members of the family are employed.

Industrial undertakings shall be deemed to include the following:—

(*a*) Mines and quarries.

(*b*) Industries in which articles are manufactured, altered, repaired, ornamented, finished or adapted for sale, or materials



Seibel in Knickerbocker Press

The Tertium Quid

How the cartoonist of the "Knickerbocker Press" pictures the situation at the recent labor conference at Washington

are transformed (including the generation and transformation of electricity, shipbuilding, laundry work).

(*c*) Construction, reconstruction, maintenance, repair, alteration or demolition of any building, railway, tramway, harbor, dock, pier, canal, inland navigation, road, tunnel, bridge, viaduct, sewer, drain, well, telegraphic or telephonic installation, electrical undertaking, gas work, water work or other work of construction, and the preparation for and laying the foundations of any such work or building.

(*d*) The transport of passengers or goods by road or rail, including the handling of goods at docks, quays, wharves, and at warehouses, but excluding transport by hand.

The national law shall define the line of division which separates industry on the one side and commerce and agriculture on the other.

2. The working hours of employed persons shall not exceed 48 in the week, with the exceptions hereinafter provided; but the provisions of this Convention shall not apply to persons holding positions of supervision or management or employed in a confidential capacity who are not usually employed in manual labor. Where persons are employed in shifts, it shall be permissible to employ persons in excess of 48 hours in any week if the average number of working hours over a period of one month or less does not exceed 48.

3. The limit of 48 hours may be exceeded in case of accident, breakdown of machinery or plant, or other emergency, but so far only as may be necessary to avoid serious interference with the ordinary working of the undertaking.

4. The limit of 48 hours may be exceeded in those industries or processes which are required by reason of the nature of the industry or process to be carried on continuously by a succession of shifts, subject to the condition that the working hours shall not exceed 56 in the week on the average. The limitation of the hours of work shall not affect any holidays which may be secured to the workers in such industries by the national law in compensation for the weekly rest day.

The industries included in Schedule A shall be regarded as industries to which this Article applies.

5. The limit of 48 hours may be extended to 60 in the case of any of the classes of workers included in Schedule B.

6 (*a*). In industries in which the conditions specified in Schedule C exist, overtime for not more than 150 hours in the year may be worked, subject to the condition that a worker when employed overtime shall receive a rate of pay which shall be higher by at least 25 per cent. than his normal rate of pay.

(*b*) In other industries overtime for not more than 150 hours in the year during the next five years and afterwards for not more than 100 hours may be worked subject to the same conditions as in (*a*).

7. If any of the contracting States claims that any industry other than those specified in Schedules A, B or C carried on in its territory comes within any of the foregoing Articles, it shall notify the same to the Governing Body of the International Labor Office.

8. In order to facilitate the enforcement of the provisions of this Convention, every employer shall be required:—

(*a*) To notify by means of a notice posted in the works or other suitable place, or by such other method as may be approved by the Government, the times at which the employment of his workers commences and ends, or where work is carried on by shifts, the times at which the employment of each shift commences and ends. The times shall be so fixed as not to exceed the limits provided for under this Convention, and when notified shall not be changed except with such notice and in such manner as may be approved by the Government.

(*b*) To notify in the same way such rest times observed during the period of work as are not reckoned as part of the working hours.

(*c*) To keep a record in the form prescribed by the national law or order of the Executive Government of all additional hours worked in pursuance of Articles 3 and 6 of this Convention.

It shall be made an offence against the law to employ any person outside the times fixed in pursuance of paragraph (*a*) or during the times fixed in pursuance of paragraph (*b*).

9.* In those countries in which climatic conditions, the imperfect development of industrial organization or other special circumstances render the industrial efficiency of the workers substantially different, the following modifications of the provisions of this Convention may take effect:—

.....

10. The provisions of this Convention may be suspended in any country by order of the Government, in the event of war or other emergency endangering the national safety.

11. The provisions of this Convention shall be brought into force not later than the 1st July, 1921.

Schedule A.

1. (*a*) Industries in which work is necessarily carried on by all or the great majority of the workers night and day for seven days a week:—

(i) The extraction of metal from the ore, or the recovering of metal by blast furnaces or other processes, including blast furnaces, reverberatory furnaces, retorts, electric furnaces, electrolytic process and the preliminary process of calcining ores.

(ii) The manufacture of coke and recovery of coal by-products from coal.

* NOTE.—It will be necessary in accordance with Article 405 of the Treaty to consider the modifications necessary in the case of special countries, but as the replies of Japan, China, India and other countries had not been received when this report was drafted, the Committee have not yet been able to make any recommendations in regard to them. [Cf. p. 134].

(iii) The production and refining of mineral oil, including mineral oil from shale.

(iv) Public Utility services (gas, electricity, water).

(*b*) Branches of industry in which work is necessarily carried on night and day for seven days a week, but which constitute a portion only, and generally a small portion, of the work of the establishments in which they are carried on:—

(i) Continuous processes in the manufacture of chemicals, including synthetic dyes.

(ii) Sugar refining (char-house).

(iii) Manufacture of condensed milk (receiving department and vacuum pan, pasteurizing and cooling departments).

(iv) Cement manufacture (Schneider kiln and rotary kiln processes).

(v) Steel manufacture (smelting department).

(vi) Works of construction (tunnelling by compressed air, work of pump and engine attendants).

(vii) Salt works (work of lump men and wallers).

(viii) Glass manufacture (founders, teasers, casters, drawers, Lehr kiln-men and cave-men in sheet and plate works).

(ix) Mines (minding of pumps, fans, furnaces, winding).

(x) .....

(xi) .....

II. Industries in which work, though not carried on day and night, is necessarily carried on seven days a week, e.g., manufacture of milk products, other than condensed milk.

Schedule B.

Classes of work common to most industries which require to be exempted from the limit of 48 hours because of the special conditions of the employment:—

(i) Persons who have to come in before the normal hour for beginning work, or to remain after the day's work is over, e.g., boiler attendants, engine-men, electricians, oilers and greasers, cleaners, time-keepers and checkers.

(ii) Persons who have to come in early to prepare material, e.g., sponge makers in baking trade, moulders' laborers in foundries.

(iii) Works maintenance staff, whose duty is to carry out repairs.

(iv) Laboratory chemists and persons engaged in research work and testing work.

(v) Furnace men (including glass tank men and teasers), retort men, men employed on works gas plants.

(vi) Annealers engaged on continuous work (i.e., on work where the annealing takes several days to perform), and kiln-men, oven-men and stove-men.

(vii) Day and night watchmen, caretakers, pointsmen on works railways.

(viii) .....

(ix) .....

Schedule C.

(i) Industries liable to press of work at certain recurring seasons of the year, e.g., aerated water making, beer-bottling, printing and bookbinding, preparation of food, malting, manufacture of ice, seed cleaning and grading, making and repairing of

agricultural implements or machinery, manufacture of artificial manure.

(ii) Industries liable to sudden press of orders arising from unforeseen events, e.g., making-up of wearing apparel, job-dyeing and dry cleaning, biscuit making, warehouses in which goods are made up for shipping orders, packing-ca e making for shipping orders, farriers, ship-repairing, dock laboring.

(iii) Industries in which the article manufactured or material used is of a perishable nature, e g., fish-curing, preserving of fruit, preserving of meat, manufacture of condensed milk, extraction of whale oil, manufacture of glue and gelatine.

(iv) Industries in which the time for the completion of the work or process cannot by reason of the nature thereof be accurately prescribed, e.g., bleaching and dyeing, tetxile printing, metal rolling mills and foundries, lead pipe making, copper refining, wire drawing, paper-mills, baking of bread or biscuits, tanneries, starch or cornflour works, vulcanizing of rubber, sheathing or covering of electric cables.

(v) Factories driven by water power only which are liable to be stopped by drought or flood.

(vi) .....

(vii) .....

Mr. Parsons' Address

On the subject of the 48-hour week and the proposed draft agreement submitted, Mr. Parsons, Delegate of Canadian Employers, made the following address to the Conference:

MR. PARSONS (Canada). Mr. President, being a member of the employers' delegation who could not see his way clear to subscribe to the declaration and the proposition brought into this house by Mr. Marjoribanks, representing the employers in general, I would like to have the opportunity of stating my reasons for not joining in that proposition and to make some general observations upon the question under discussion.

In the first place, it appears to me that those who were responsible for bringing forward the draft convention—which we have been giving consideration to—have brought forward something which they have tried to fit to all the nations of the earth represented, but hardly with success. It is as though they handed out a suit of readymade clothes to the different countries, irrespective of their size or of their conditions, and had tried to make the same fit. In our country, in the ready-made clothing industry, they have, in connection with each large concern, what they call, I understand, a butcher, whose business it is to try and make fit any ready-made garments that are put upon the customer. Now, it appears to me that in connection with this labor programme, of the eight-hour day in particular, that we need a butcher for each country in order to make the programme fit as submitted to us.

I submit, that the first consideration before us in this matter is the welfare of the workmen. And in that proposition I am sure I will carry the judgment of every delegate and of every adviser in this house. I have a firm belief in co-operative methods, and committees, and commissions—what you call perhaps in the old land, shop committees. I also believe in the weekly day of rest. I also believe in profit sharing. I believe in everything that can be done in every individual industry in order to further the interests of the worker. I believe that the day has come when we can all say with Charles Dickens, "When men and women seem by one consent to open their shut-up hearts freely and to think of people around them as if they really were fellow passengers to the grave and not another race of creatures bound on other journeys."

An International Question

I do not, therefore, object to this eight-hour day, per se. My objection comes from the fact that in the present world-wide conditions that we are not prepared for it and that we can not fit it to our individual country's economic system. The question of hours is particularly a national and international economic question. And let me say, Mr. Chairman, that looking at it in this regard, the governments of the countries concerned, the employers' delegates representing the different countries and the employees are all equally concerned in a proper, a just, and a satisfactory solution of this great question.

Let me repeat again that this question should not be considered by any one class of people in any one country or in all the countries of the world. It must be considered as a national—a great national question, to which each one of us must give his very best consideration. What is the condition of the world to-day? You will agree with me in saying that there has been physical and material devastation in all the war-worn countries of Europe; that there is a great shortage of man power in all the countries; that there is a lack of foodstuffs; that we have huge national obligations which must be considered and met. In a word, the countries of the world have mortgaged their futures, and to-day we ought to give consideration to the question as to how the mortgage will be paid, for it assuredly meets us on every hand. The world is not suffering to-day on account of long hours, my friends. The world is suffering to-day for lack of food and clothing.

If my information is correct, and I believe it to be, there are 100,000,000 people on the verge of starvation in the Old World to-day. Not one-third of all the industries of the Old World are producing at full efficiency. What situation does this reveal to us? Is it a time when we ought to be considering shorter hours, which, to my mind, necessarily mean lack of production?

What did we hear from our French delegate of the employers? That since the eight-hour day had been introduced in France there had been a corresponding falling off in production; that from 10 hours to 8 hours a day meant 20 per cent. of a reduction in production.

Will shorter hours make up this lack? What have we before us as a proposition in connection with the hours? The draft convention calling for a week of 48 hours; my friends of labor from Canada, and, I think, perhaps, some other countries, calling for a week of 44 hours; the miners of this country calling for a week of 30 hours.

Have you ever thought that if we are to have a maximum of hours of work that it might be also wise to have a minimum in consideration of the world's great need?

The country which I have the honor of representing as an employers' delegate at this convention, Canada, is one of the great food-producing countries of the world, like its great sister on the south. This North American Continent is the bread basket of the world. I noticed that in the speech of the Right Hon. Mr. Barnes the other day, in speaking of this draft convention, he specially emphasized the fact that agriculture was excluded. Now, my friends, what does it mean when we exclude agriculture in a country like Canada, and I should think—although I have no right to speak for this country—in a country like the United States?

It means this in Canada: We have to-day a shortage of man power on our farms; everywhere our farmers in our great agricultural stretches are crying out for more help, and they can't get it. And what is the consequence? A great loss of production and higher prices.

Cause of Profiteering

We talk about profiteering. Profiteering is only a symptom. There would be no profiteering if we had plenty of production the world over; but it is the shortage of production that is responsible for profiteering. And what do you do for the farmers when you try to bring in a short working-day in industry? You may say that you do not interfere with agriculture. Let us look at it a moment. You simply draw, as if by a magnet, the workers from the farms into our towns and cities because of the shorter hours, the high wages, and the lights and shades of city life.

Who will suffer on account of the shortage of foodstuffs provided by the farms because of the shorter hours drawing the workers into the towns and cities? In the first place, the workers themselves will be the first to suffer because of this shortage and the consequent higher prices. In the next place the farmers will suffer. How? Because their children—the boys and the girls—and the men and the women will be drawn to city life, meaning thus a smaller production and less profit. Then, again, the farmers are bound to suffer in another way: The shorter hours in city life, towns, in our industries, will



Sykes in Philadelphia Public Ledger

Samson

make dearer agricultural implements, dearer food and clothing that the farmer uses, and he is hit in both ways; in the first place, because he has not men enough to work his farm to produce what is necessary; and, in the second place, because all that he uses in manufactured articles is increased greatly in price. Not only that—I am speaking for my own country, and yet I believe it applies, as I have said, equally to this country and to other grain-growing countries of the world—if there is a shortage of foodstuffs in our agricultural districts in this North American Continent, the workers all over the world are bound to suffer. They are bound to suffer because of the shortage. They are bound to suffer because of the consequent higher prices. I ask you, therefore, if you consider that it would be sound economically, in the present situation and circumstances of the world, to create such a shortage as will surely be created by shortening working hours.

Objects to so Many Exceptions

Again, Mr. President and gentlemen, I object to this draft convention which has been presented to us on account of the fact that it contains so many exceptions of one kind and another, and as referring to one country and another, that it will cause great discontent among those who are thus excepted from its operation. Take again our own country of Canada, we have great seasonal occupations. For instance, the lumbering industry, which is one of our great industries from east to west, it is well known that you can only carry on the lumbering industry when you have the water to run the logs. In part of our country, as in some other countries who perhaps have not the lumbering industry as we have, we are frozen up for a number of months of the year, and therefore we must make hay while the sun shines. Also there is a great difference in climate in our wide stretching country—on the far west, British Columbia has a climate somewhat like Great Britain. On the east it is frozen up for four or five months of the year. You will see at once that the exceptions applying on account of our great differences of climate, and other factors, will mean that there will be so many industries and workers excepted, that those workers who are excepted will become utterly dissatisfied.

Those who have to work a larger number of hours than the proposed eight-hour day, if that should come into effect, will soon say, "We are not going to work longer than our friends who have the shorter period," and thus again you decrease production and cause dissatisfaction among the workers.

Unlike Great Britain, according to the statement of the Right Hon. Mr. Barnes, we did not promise our workers, either before the war or during the war, that their conditions of labor would be altered, that they would have shorter hours, or anything of that nature. Our workers in Canada put their backs into their work in the first place because they were loyal to the cause, and in the next place because they received higher wages than ever they secured before. In all honesty I am bound to say that some of them, especially working on piecework in the munitions, worked harder than they should have done because of these higher wages.

I know it may be said that at the present time there is no particular standard of hours, and therefore there are many exceptions to what may be called even a sort of a general rule as to working hours. But, at the present time it is recognized by all the workers that there are different hours which apply to different industries, and it is so understood. If we try to bring in what is called the universal eight-hour day, then we are faced almost at once by the necessity of extending that day and those hours of work to seasonal and other occupations, and that, to my mind, will be the cause of great dissatisfaction.

There is, however, another very serious objection, perhaps one of the most serious objections that can be brought forward against the legislation which is proposed in this draft convention. It is the attempt to deal by legislation with business matters. This is an economic problem, and I fear that if we try to settle it in our legislative halls in a political way, it will receive a political and not an economic answer. The more business interests of any country get into the hands of the government and politicians the more difficult it is to keep out influences which should never come between one class and another in any country.

Nine Different Solutions

In the case of Canada we have nine different Provinces dealing with the labor question. I understand the same is the case in the United States, where forty-eight legislatures deal with the labor question. You can therefore see how difficult it is to arrive at any agreement, when you consider the different interests of these different Provinces or States.

In my opinion an attempt to limit the hours of work will mean the deathblow to small industries and would prevent starting new ones. Let me explain what I mean. The great majority of employers, on this continent at all events, have come up from the ranks or have had next to nothing to start with. How have they succeeded in coming to their present positions in the industrial world? It has been by working long hours, or rather with no regard to hours; also by thrift, the practice of economy, ambition, and by accumulating savings. A man starts in a very modest way. Perhaps he would gather about him three or four or a dozen workers who are possibly interested with him in some way in the venture. He works long hours because he knows that he is up against large industries with great capital and ability to do what he could not possibly do. The only way that he can get a start is to work longer and to secure men who will work with him. In that way he gradually gets ahead and assumes a place in industrial life of which he may well be proud. That is the history, I venture to say, of nine-tenths of the employers on this continent. If it is true of individual employers, I submit that it is likewise true of the small and newer nations. It will be the larger nations, if we go into this universal eight-hour day, that will have the great benefit. They will have the benefit of raw materials. They will have the benefit of capital. They will have the benefit of transportation, and, therefore, they, like the great industrial corporations, will cut the melon. That is the way business tends, either individually or nationally, these days.

There is another reason why, as representing the employers of Canada, I can not agree to become one of the signers of this draft convention. It is that, along with our friends of the United States, we inhabit the North American Continent. These two countries have interests in common. Our industrial life is much the same. Our wages are about the same. Our social conditions are almost identical. We have similar aims and similar industrial aspirations.

The United States has not yet signed the treaty of peace. I do not know, and I suppose none of us knows, whether the United States will sign the treaty of peace, or if they do, whether the reservations which they may see fit to make will be of such a character that they will reserve to themselves certain matters regarding labor conditions, as well as other considerations. In other words, the uncertainty that there is in connection with this matter in the United States would make it suicidal for us, their small neighbor, in point of population, in the north, to agree to what they had not adhered to. We have eight or nine millions of a population. Our industries are young. They lack capital. We are struggling. We are alongside a magnificent country of one hundred and ten millions in population, with great industries and great wealth. It is quite easy to understand, therefore, that until the United States has spoken that Canada must keep silent.

In closing, I would say that in Canada in the month of September we held a great national conference at the seat of government, Ottawa. There was represented in that conference an equal number of representatives of employers, of employed, and of the Government and the public. The employers' delegates could not agree with the employees in connection with this proposition of the eight-hour day. We, therefore, as employers, sent forward our own resolution to the Government of Canada, asking that a commission be appointed who would give thorough study to this important subject, and that upon this commission there would be represented an equal number of employers and of employed. That question, therefore, so far as our country is concerned, we hope will be studied in the light of all the facts, so that there will be no hasty conclusion reached, otherwise we might arrive at a decision which might interfere with our country's development and well-being.

Hopes for Reduced Hours

Let me say that I know I am speaking for the employers of Canada, and I feel sure that I am speaking for all the employers represented in this conference, when I say that we hope that the day will come when by the introduction of machinery to a greater extent than at present, as well as labor-saving devices, that the hours of work may be greatly reduced from what they now are. Personally I will hail that day on behalf, let me say, of my fellow-workers—for I have worked all my life—and I would be glad, like others, of a little bit of respite from the long hours and toil of a lifetime. I don't believe that that time has arrived yet. My principal objection, therefore, is that, in view of the world's needs, we certainly should not consider shortening the hours of toil, and, therefore, to my mind, decreasing the production.

Social welfare for any or all classes of the people will never be attained by uneconomic regulations. It is utterly impossible. If any one class in a community obtains an unfair advantage the other classes must suffer, and we can not bring forward in any country of the world to-day any regulations which are not based on a proper economic footing and attain what we call social justice. The thing can not be done. The two things do not work together.

Let me just state that if we attempt this it is the surest way of wrecking our civilization, and we have the best civilization to-day that the world has ever brought forward. Let us take care of it and mend it here and there, but not attempt to destroy it.

I would like to read two or three words by Mr. W. A. Appleton, president International Federation of Trades Unions. Mr. Appleton points out that "Phrases and catch words are everywhere taking the place of production. Unless the world produces it can not live."

He says, "The State is often described as a ship. To-day the ship is on a lee shore and all hands must work at maximum speed if she is to be saved from utter wreck."

Gentlemen, let us face present conditions as honest men, whether representing our Governments, employers or employees, and work out this question in accordance with economic standards. (Applause).

Unemployment

It was evident that the Labour Delegates wanted to get an international arrangement by which some scheme of employment insurance would be put into force. Mr. Parsons, as the Delegate of the Employers of Canada, strongly opposed any such suggestion, on the ground that in a country such as Canada there was no legitimate reason for unemployment, except under very abnormal conditions which could be taken care of as they arose.

At the time of writing the International Labour Conference is still in session and final action has not been taken on any subject on the agenda.

News and Views of the Association

There will be found each month in this department a record of the various activities of the Canadian Manufacturers Association during the preceding month. The information is supplied to INDUSTRIAL CANADA officially, and all members of the Association are urged to acquire the habit of reading and checking over the contents of the department carefully in order to keep themselves posted on the work of the Association

Executive Council Meeting

The November meeting of the Executive Council was held on the afternoon of Thursday, November 27th, at the Prince George Hotel, Toronto, with the president of the Association, Mr. T. P. Howard, in the chair. There was a very full attendance of members, the following signing the roll:—Messrs. C. Howard Smith, W. H. Shapley, E. J. Davis, J. S. McKinnon, H. A. Telfer, S. J. Williams, E. Y. Chown, W. M. Gartshore, W. A. Richardson, E. G. Henderson, P. W. Ellis, T. A. Hollinrake, Jas. A. Riordan, J. S. A. Whealy, R. W. Leonard, E. H. Gurney, R. Thomson, J. F. M. Stewart, F. B. Stewart, Thos. Roden, H. M. Snyder, W. C. Coulter, C. A. Waterous, G. H. Douglas, Carl Riordon, G. C. Coppley. The meeting was one of unusual interest, several matters of vital importance to Canadian manufacturers being under consideration.

Annual Meeting, 1920

The President and General Manager, who were appointed a special committee to select the place and date of the next Annual Meeting of the Association, have reported to the Executive Committee that they have arranged to hold the meeting in Vancouver, B.C., on June 8 and 9, with the annual dinner at Victoria, B.C., on June 10. The detailed arrangements will be completed as soon as possible and in the meantime all members will be notified of the date and place so that they may make the necessary arrangements to attend.

December and January Meetings

The by-laws do not provide that a meeting of the Executive Council should be held in December and the question of holding another meeting before the end of the year came up for consideration at the November meeting of Council. It was decided that a meeting should be held sometime between the middle of the month and Christmas in Toronto. The January meeting will be held in Montreal on the regular date.

Membership Campaign

Reporting just prior to the membership campaign, which took place during the week, December 1 to 6, the Executive Committee stated that much preliminary work had been done. Some time ago lists of non-members had been supplied to the divisional secretaries. A personal letter from the President containing an appeal for each present member to get one new member during the coming year was mailed to the entire membership. A special letter enclosing pamphlets was mailed to all non-members on the list, announcing the membership campaign and setting forth reasons why they should join the Association. 9,000 reprints of the article on the Association's activities which appeared in the November number of INDUSTRIAL CANADA were struck off, and have either been distributed or are available for distribution. In addition to this, a small pamphlet setting forth the services of the Association, was printed to the extent of 9,000 copies. It is proposed to follow up the membership campaign with a steady campaign by personal solicitation, where possible, and by correspondence.

Tariff Board Urged

A strong deputation of members of the Executive Council waited on the Government at Ottawa on Tuesday, November 25, to urge the appointment of a permanent board of experts to advise the Government on questions of tariff. The deputation, which was headed by Mr. T. P. Howard, the president, was received by Sir George E. Foster, Hon. C. C. Ballantyne, Hon. J. A. Calder and Sir Henry Drayton. The manufacturers made it quite clear that the board should be simply advisory in character. They had no desire that it should usurp any of the functions of the Ministers or of Parliament. At the same time they felt that the Minister of Finance should have to assist him, a board of experts who would make a study of trade conditions and the best scientific means of adjusting or revising the tariff to meet any general or special conditions arising from time to time. The deputation further questioned the desirability of a sub-committee of the cabinet going through the country and conducting a tariff inquiry, on the ground that it might result in political agitation of a disturbing nature. It was made clear, however, by the Ministers present that the Government was committed to this policy. Altogether it was felt that a favorable impression had been created on the minds of the Ministers as a result of the argument advanced on the necessity for a permanent tariff board.

Commercial Intelligence Committee

A meeting of this Committee was held on Thursday, November 20. The following gentlemen, suggested by their respective divisions, were added to the Committee:—

L. W. Simms, T. S. Simms & Co., Limited, St. John, N.B.
R. B. Stewart, Maritime Bridge Co., Ltd., New Glasgow, N.S.
A. H. Brittain, Maritime Fish Corporation, Montreal, Que.
Jos. Daoust, Daoust, Lalonde & Co., Ltd., Montreal, Que.
Hugh Scully, Willys-Overland, Ltd., Toronto, Ont.

In reporting on their work to the Executive Council, the committee gives an outline of the recent services rendered. In addition to the usual volume of correspondence and numerous interviews given to satisfy inquiries, supervision was given to the circulation of the report of the Canadian Economic Commission to Siberia; the Government was provided with a complete set of the proofs of the new *Trade Index* and a separate list of all the

Assistance for Canadian Manufacturers Transacting Business in the United States

Canadian manufacturers who encounter difficulties when transacting business in the United States will find that the Canadian War Mission in Washington can in many instances render valuable assistance.

Offices of the Mission are located in the Munsey Building, Washington, D.C., and Mr. M. M. Mahoney, the Secretary, is constantly in touch with the various Departments of the United States Government, thus enabling him to intercede successfully in the interests of Canadian business houses.

Members desiring to take advantage of this service should communicate direct with Mr. Mahoney, outlining fully all facts in the case; or, if they desire, the Association will be glad to take the matter up on their behalf.

articles made in Canada for the first time within the last three years; the Censor and Statistics Bureau was supplied with list of manufacturers in Canada and through the facilities at its disposal for *Trade Index* work the committee were able to supply the Membership Committee with a complete non-members' list.

Appreciation of services of the Committee in getting foreign commercial reports has been exemplified by their increasing use. An opportunity has been presented to strengthen its work in this connection at small cost, and the Committee is strongly of the opinion that it should be taken advantage of. To this end it has recommended to the Executive Committee the expenditure of the nominal sum required.

The Committee has in the past gathered information as to the quantities and values of specific goods annually consumed in Canada for manufacturers who are seriously proposing to manufacture goods not previously made in Canada or not in sufficient quantity to supply the bulk of the domestic demand. The Committee was impressed with the importance of this beneficial work and recommended that it be continued to the limit of the facilities at their disposal.

Committee on Smoke By-Law

The effect of the present shortage of coal has acted adversely on many factories and industries. The Toronto Branch Executive has, accordingly, found it expedient to appoint a sub-committee consisting of Messrs. Ed. J. Freyseng and T. F. Monypenny, to co-operate with the Commissioner of Property of the City of Toronto in relation to alleged offences against the Smoke By-law. It was complained by the city authorities that, while a great many factories and industries are at present complying with the by-law, there are others that are making little or no attempt to live up to the regulations.

The sub-committee promptly arranged for a conference with Commissioner Chisholm and representatives of nine Toronto corporations, against which complaints had been made, with the result that all the cases have been postponed, *sine die*. The manufacturers intend, meantime, to adopt such remedies as may be practicable. It transpired that from thirty to forty prosecutions a year are instituted to compel the prevention of smoke, and fines imposed, but without perceptible improvement.

The Committee is giving consideration to the desirability of approaching the city authorities with a view to the rescission or modification of harassing invidious restrictions calculated to discourage industries from locating in this district.

New Branches in Ontario

As the result of intensive organization following upon the divisional organization, definite steps are now being taken to form new district branches in Kitchener, Peterboro, Galt and Windsor, and the Secretary is preparing an itinerary for the Head Office officials to visit these centres.

Bulk Sales Act

At the Conference of Commissioners on Uniformity of Legislation in Canada, held in Winnipeg, August 26th-29th, 1919, the draft of a model Bulk Sales Act was considered by a Committee which recommended that the principle of the draft be approved, and that the draft be recommitted to the Committee having the matter in charge for further consideration. The draft will be again presented for consideration at the next Annual Meeting of the Conference, and meantime, the Committee was authorized to submit the draft to all interested parties. Our Legislation Committee will give careful consideration to the draft and report to the Council.

Canadian Industries Exhibition

The Association is co-operating with the managers of the Canadian Industries Exhibition, Royal Agricultural Hall, London, England, on the recommendation of Mr. Lloyd Harris, Chairman of the Canadian Mission in London. A circular has been issued to all our members asking them to direct inquiries and applications for space to Mr. O. C. Pease, 41 Victoria St., Toronto, who is the representative for the exhibition authorities in Canada. Fuller particulars regarding the Exhibition appear elsewhere in this number.

Visit of British Empire Delegates

On the suggestion of the Association, the Canadian Government issued an invitation to the delegates from all the countries of the British Empire who are now attending the first International Labour Conference in Washington, to visit Canada at the conclusion of the Conference. The invitation was accepted and tentative arrangements were being made, but owing to the outbreak of the smallpox epidemic in Ontario, these arrangemetns were cancelled as the delegates decided not to come.

Canadian Association of Advertisers

Closer co-operation with the Canadian Manufacturers' Association is desired by the Association of Canadian Advertisers, who, at their annual meeting in Toronto, on November 20 and 21, appointed a special committee to work with the C.M.A. in all matters pertaining to advertising and marketing. Good service has already been rendered to this Association by the A.C.A., in giving expert advice on various advertising propositions which have come up from time to time, and it is the desire to extend this service. At the annual dinner of the A.C.A., held at the King Edward Hotel, Toronto, on the evening of November

20, the principal speaker was Mr. Lloyd Harris, who dealt with the work of the Canadian Mission in London. He was followed by Mr. H. Macdonald, secretary of the Ontario Division, C.M.A., who gave the company present a comprehensive account of what this Association is doing, through INDUSTRIAL CANADA, the *Canadian Trade Index* and other channels, to promote the interests of Canadian industry.

Certificates of Membership

The Executive Committee have decided that the large framed certificates of membership in this Association should be issued in the name of a firm only, and not in the name of the individual, and that these certificates should be signed by the President and the General Manager. They have arranged further that small pocket certificates should be printed and issued to individual members, and that these should be signed by the General Manager and General Secretary. They have also instructed that before a resignation is accepted all certificates of membership must be returned to the Head Office of the Association to be cancelled.

The Use of Canadian Goods

It has been brought to the attention of the Executive Committee that the employment of United States engineers and architects on construction work in this country is resulting in the increased use of articles manufactured in the United States in preference to articles manufactured in this country. The Committee have instructed that a circular be sent to all members of the Association, asking them to insist that Canadian goods be used in all construction work within their control, and also that the chief engineering firms, architects and others be communicated with and asked to specify Canadian material so far as possible.

British Excess Profits Tax

Certain Canadian manufacturers who are carrying on export trade with Great Britain and who have already been taxed under the Canadian Business Profits War Tax Act, have been called upon to pay taxes in Great Britain under the Excess Profits Duty in that country on business they have done there. The Executive Committee in its report to the Executive Council recommended that a strong deputation of those interested should interview the Dominion Government immediately and lay the case of these Canadian exporters before the Minister of Finance. This action was agreed upon by the Council.

Our Opportunities in China

Reporting to the head office from Vancouver, Hugh Dalton, Secretary of the Pacific Division, says:—"Trade Commissioners and others arriving in Vancouver from the Orient continue to emphasize the immense possibilities of the business to be done by Canadian manufacturers in Japan and China, but they invariably point out that Canadian manufacturers will only obtain their proper share of this business by following the example of the American manufacturers and sending their own representatives to the Orient. The Chinese Consul here, who has recently returned from spending five months in China, tells me that there is a vast number of representatives of American manufacturers now in China. He says that the Chinese, from long and satisfactory experience with British manufacturers, would prefer to do business with the latter, but on account of the present inability of British manufacturers to supply the wants of the Chinese market, they would like to do business with Canada in preference to the United States. If our manufacturers, however, do not go after the business, it will almost certainly go to the Americans. The Chinese Consul tells me that the Chinese boycott of Japanese goods and ships is growing rather than diminishing, which is an additional reason why our manufacturers should make greater efforts to get into the Chinese market, as that market is much larger and more satisfactory to deal with (as I think Captain Robert Dollar has already told you) than the Japanese market."

Cheap Power for Maritime Provinces

During the meeting of the Executive Council of the Association in St. John, N.B., on October 1st, and the subsequent trip of various members of the Association and Officials through the Maritime Provinces, one of the chief questions discussed was the problem of securing an adequate supply of cheap power for these Provinces. The interest of our Maritime Provinces' members was quickened by the descriptions furnished by Ontario members of the beneficient results to industry which had been obtained by the introduction and development of cheap power in Ontario.

At the meeting of the Maritime Division of the Association, held in Halifax on May 28th, 1919, the Governments of the Maritime Provinces were memorialized by resolution with the request that every effort should be made to investigate the possibilities of developing cheap power in the Maritime Provinces, and to offer every facility and encouragement to assist in such development. It was



The Magic Key

How the cartoonist of the London "World" pictures the labor situation

PETERBORO WON FIRST HONORS

The first city to report a One Hundred Per Cent. total in the big membership drive of December 1 to 6 was Peterboro, and the total was gained on the very first day of the campaign. With six new memberships secured, every one of the 32 manufacturing establishments of the city is now a member of the C.M.A. This fine achievement reflects great credit on the spirit of the Peterboro manufacturers, while special thanks are due to Messrs. W. R. Breyfoyle of the De Laval Co., and Edgar Worth of Canadian Woollens, Limited, for their leadership in the good work.

finally decided, on the request of Mr. R. H. MacKay of New Glasgow, one of our members, who is also a member of the Nova Scotia Power Commission, to ask the Executive Council of the Association to endorse the resolution which had been submitted by the Maritime Division to the Governments of Nova Scotia and New Brunswick on the subject of power. This was done at the October meeting of Council, and a copy of the resolution was forwarded to the Premiers of New Brunswick and Nova Scotia. A reply has been received from the Premier of New Brunswick stating that the subject is being considered and that legislation will probably be introduced during the coming Session bearing on the matter. A letter has also been received from Mr. MacKay on behalf of the Nova Scotia Power Commission, thanking the Association for its assistance.

Educational Industrial Films

A considerable quantity of information has been gathered by the Commercial Intelligence Department relating to the use of industrial films for educational purposes through moving picture houses in Canada and elsewhere. The Commercial Intelligence Committee at its last meeting discussed the subject of motion films and was of the opinion that a purely advertising film concerned only individual manufacturers, while the educational film from which all direct advertising has been deleted might be of interest to the sections or groups of the Association. Its recommendation is, therefore, that the Secretary convey the information at his disposal in a report to the groups and sections for their consideration.

The Exchange Situation

The attention of the Commercial Intelligence Committee has been called recently to the practice of some export houses and others insisting on payments from abroad being made in New York funds. It was pointed out that from both a business and patriotic point of view, there was much to be deplored in this practice. The Committee has accordingly advised the issuance of a circular to the membership pointing out the value of making quotations on the basis of Canadian exchange and accepting payment for goods in Canadian funds.

Conditional Sales Act

A Committee of the Conference on the Uniformity of Legislation in Canada, held in Winnipeg, on 26th-29th August last, reported that having considered section by section the draft of a model Conditional Sales Act, they recommend that the draft should be referred to the New Brunswick Commissioners with instructions to redraft the statute, and submit it to the Commissioners from the other provinces, and subsequently to report thereon to the Conference. One Legislation Committee will report on the subject.

Technical School Scholarships

One of the most valuable services rendered by members of the Toronto Branch C.M.A., is the giving of scholarships to pupils of the Central Technical School. Referring to these scholarships at the Annual Commencement of the school held on November 21, Dr. A. C. McKay, the principal, said that the special day courses have been well attended and that, as far as possible, the classes are divided to give definite practical instruction in the closely related industries. From both regular and special day classes, there is a constant stream of young people entering industrial life, with an ever-increasing equipment of mental culture and practical efficiency, the scholarships given by the manufacturers being a strong factor in helping the school to hold young people until they have secured an adequate preparation for life.

The evening classes have continued for some years to grow in numbers and indications point to an immediate demand on the school space and equipment, far in excess of what is at present available. The total enrolment in the Central Technical School, including 930 returned soldiers, now is 8.895. The following are the scholarships donated by members of the Toronto Branch C.M.A., to the Central Technical School in 1919:

Name of Donor.	Scholarships.	Amount.
Anthes Foundry, Ltd.	1	$25 00
Banfield, W. H. Sons. Ltd.	1	25 00
Beardmore Belting Co., Ltd.	1	25 00
Boeckh Co., Ltd.	1	25 00
Booth Coulter Copper & Brass Co., Ltd.	1	25 00
British American Oil Co., Ltd.	2	50 00
Brown Bros., Ltd.	1	25 00
Canadian, W. A. Rogers Co.	1	25 00
Christie Brown & Co., Ltd.	1	25 00
Clarke, A. R., & Co., Ltd.	1	25 00
Consumers Gas Co. of Toronto	1	25 00
Davies, Wm., Co., Ltd.	1	25 00
Dodge Mfg. Co., Ltd.	1	25 00
Dunlop Tire & Rubber Co., Ltd.	1	25 00
Eaton, T., Co., Ltd.	2	50 00
Ellis, John F.	1	25 00
Firstbrook Bros., Ltd.	1	25 00
Freyseng, Ed. J.	1	25 00
Goodyear Tire & Rubber Co., Ltd.	1	25 00
Gourlay, R. S.	1	25 00
Graves Bigwood Co.	1	25 00
Gurney Foundry Co., Ltd.	1	25 00
Gutta Percha & Rubber Ltd.	1	25 00
Hamilton Gear & Machine Co.	1	25 00
Hunter Rose Co.	1	25 00
Harris Abattoir Co., Ltd.	2	50 00
Imperial Oil Co., Ltd.	1	25 00
Imperial Varnish & Color Co., Ltd.	1	25 00
Inglis, John, Co., Ltd.	1	25 00
International Business Machines Co., Ltd.	1	25 00
Lever Bros., Ltd.	1	25 00
Laidlaw, R., Lumber Co., Ltd.	1	25 00
Lowndes Co., Ltd.	1	25 00
Massey-Harris Co., Ltd.	2	50 00
McGregor & McIntyre, Ltd.	1	25 00
Roden Bros., Ltd.	1	25 00
Rolph Clark Stone, Ltd.	1	25 00
Rous & Mann, Ltd.	1	25 00
Southam Press, Ltd.	1	25 00
Scythes & Co., Ltd.	1	25 00
Stauntons, Ltd.	1	25 00
Steel Co. of Canada, Ltd.	1	25 00
Toronto Carpet Mfg. Co., Ltd.	1	25 00
Toronto Hardware Mfg. Co.	1	25 00
Toronto Plate Glass Mfg. Co., Ltd.	1	25 00
Toronto Salt Works, Ltd.	1	25 00
Turnbull Elevator Mfg. Co., Ltd.	1	25 00
Warwick Bros. & Rutter, Ltd.	1	25 00
	52	$1,300 00

In addition a sum approximately $200 was distributed as prizes for students in the evening schools by the Toronto Branch C.M.A.

The Toronto Branch was represented at the Annual Commencement by George Brigden, Chairman Educational

Committee; J. S. McKinnon, First Vice-President; T. F. Monypenny; Ed. J. Freyseng and H. Macdonald, Secretary. The scholarships to the day classes were presented by Mr. Moneypenny and the prizes to the evening classes by James Richards, Chairman Advisory Industrial Committee, and George Brigden. Additional interest was lent to the occasion by the presence of Hon. R. H. Grant, the new Minister of Education of Ontario, who gave assurance of his sympathy and interest in everything that advanced the educational interests of the Province.

Australasian Markets

The Association has been recently in receipt of a communication from the New Zealand Loan and Mercantile Agency Co., Limited, with head office in London, England, relative to the establishment of trade relations between Canada and Australia and New Zealand. The company are prepared to discuss with Canadian manufacturers exclusive agency arrangements for any of the following commodities: Agricultural implements, binder twine, brushes, butter boxes, cement, confectionery, engines, fencing, roofing, household ranges, leather substitutes, pianos, pumps, tires and rubber goods, tools and waggons. The company was incorporated in 1894; they have a paid-up capital of ten million pounds, and operate twenty depots in Australia and ten in New Zealand, where they buy from and sell to the farmers.

Membership Campaign in Ontario

The Executive Committee of the Ontario Division at its last meeting appointed Mr. W. C. Coulter and the Secretary Mr. H. Macdonald, a Committee, to divide the province into districts or zones and arranged that a representative manufacturer in each such district should be requested to convene a meeting of all manufacturers who are members within each territory so that a local committee for the campaign might be organized with a district chairman and secretary.

It was also arranged that a circular should be mailed from the Head Office in sufficient time to reach all members, prior to December 1st, featuring the President's appeal at the Annual Meeting for each present member to secure one new member this year. Literature was also prepared and forwarded to all non-members to prepare them for the canvass.

Addresses Ontario Division

A most gratifying number of members of the Ontario Division turned out to hear Mr. Lloyd Harris, Chairman of the Canadian Mission in London, at a special luncheon held at the Prince George Hotel, Toronto, on Thursday, November 27, at 12.30 noon. The large banquet hall of the hotel was completely filled, over 250 being present, and in the gathering were a large number of out-of-town members. Mr. T. P. Howard presided and with him at the head table were the guest of honor, Mr. Lloyd Harris, and Messrs. J. S. McKinnon, George H. Douglas, C. Howard Smith, F. W. Stewart, Carl Riordon, Colonel R. W. Leonard, S. J. Williams, W. C. Coulter and J. E. Walsh. Mr. Harris spoke for upwards of an hour and held the close attention of the members throughout, as he gave a clear and comprehensive outline of Canada's foreign trade opportunities and the obligations resting on the country.

Activities of the Quebec Division in November

By. W P. HUGHES
Secretary, Quebec Division

DURING the month of November the Montreal office continued to be the rallying centre for a large number of Trade Section meetings. Several of the more active of these local bodies are meeting more or less regularly at definite intervals, and the tendency to establish this practice seems general in this locality. At least one of these groups meets in the office every week. It is a hopeful sign that manufacturers are learning to secure for themselves the benefits of such frequent conferences, and every encouragement is being given to this movement by the local organization.

The November meeting of the Executive Committee was held on Thursday, the 20th. At this meeting eight applications for membership were submitted, and plans concluded for the big membership drive during the first week of December. The eight applications thus recommended to the Central Executive for final approval, were as follows:

La Gerbe d'Or, Ltd., Terrebonne, Que.
The Victoriaville Furniture Co., Victoriaville, Que.
Victoria Hide & Skin Co., Victoriaville, Que.
Canada Broom Co., Montreal.
Casavant Freres (C. J. Laframboise, 2nd), St. Hyacinthe.
Phœnix Bridge & Iron Works (Wm. D'Oyley Hutchins, 2nd), Montreal.
Parker, Irwin, Ltd., Montreal.
Trudeau Carriage, Ltd., Montreal.

For the membership campaign in December the province has been organized and canvassers appointed. The three branch organizations within the province are made responsible for the territory within their jurisdiction. Prominent members have been written to in the various centres outside of the branch districts, and the ready response from these members to undertake the work of canvassing prospective members in their vicinity has been most gratifying.

In Montreal the city has been divided into five sections, and each of these will be canvassed by a team under the leadership of one of the members of the local Reception and Membership Committee. Reports will be collected in the local office each night and wired to the head office.

Arrangements have been made so that the campaign will receive widespread publicity throughout the province through the medium of the press.

Meetings have also been arranged at different points where a number of prospective members could be gathered together. Local members are enthusiastic for a hundred per cent. membership within the province, and the energy with which the campaign will be carried on will undoubtedly lead to most satisfactory results.

It was also decided at the meeting of the Executive to hold a general meeting of the Montreal Branch with an informal dinner on the evening of December 11th. The Reception Committee has been fortunate enough to secure Mr. E. W. Beatty, K.C., President of the Canadian Pacific Railway, to address the meeting, and one of the most profitable evenings which the members have ever enjoyed is looked forward to.

The Branch Executive gave its support, and appointed the Chairman, Lt.-Col. W. J. Sadler, as the branch representative

in connection with a movement to establish daylight saving for Montreal as a permanent factor each year. This movement has been started by the Canadian Club of Montreal, who have called for representatives to be appointed by the larger public bodies in this city, and it is expected that in the near future this joint committee will meet and formulate its plans for action.

Messrs. J. R. K. Bristol and S. B. Brown, the heads of the Tariff and Transportation Departments, respectively, visited the office on Wednesday, November 12th, and were able to bring the services of these departments to the direct problems of a considerable number of our branch members.

Messrs. S. B. Brown and G. P. Ruickbie of the Transportation Department, were again in Montreal on Thursday and Friday, the 27th and 28th instant, in connection with the meeting of the pulp and paper manufacturers, to study the question of freight rates on newsprint. Valuable information was collected on this subject which, it is understood, will be presented to the authorities in Ottawa in the near future.

On Tuesday, the 25th instant, a delegation, consisting of Mr. T. P. Howard, President of the Association; F. W. Stewart, Vice-Chairman of the Branch; Messrs. T. O'Reilly (Gillette Safety Razor Co. of Canada, Ltd.), B. W. Coghlin (B. J. Coghlin & Co.), K. W. Blackwell (Canadian Car & Foundry Co., Ltd.), Walter Ramsay (A. Ramsay & Son Co.), J. L. Waldie (Canadian Tube & Iron Co.), went to Ottawa, where they were joined by the members from Ontario in an interview with the Government, when the appointment of a Permanent Tariff Board was strongly urged. It is earnestly hoped by local members that their efforts were successful in persuading the Government to make this appointment, for it is felt that it is only in this way that the burning question of the tariff can be scientifically and satisfactorily settled.

Some fifteen members of the Executive Committee entertained at an informal luncheon in the Windsor Hotel on October 30th last Mr. Harrison Watson, Canadian Government Trade Commissioner in London, Eng. Mr. Watson has been in a position to secure much valuable information on the question of trade with the Mother Country, and the discussion which followed the luncheon was greatly appreciated by the local members.

The Work of Canada's Trade Commissioners

By J. M. McINTOSH
Manager, Trade Sections Department, C.M.A.

IT was a wise step on the part of the Department of Trade and Commerce to recall the Trade Commissioners from abroad as soon as practicable following the cessation of hostilities, so that they might take stock of new developments in Canadian industry and that our manufacturers might profit from the exchange of information in respect to the markets in which the services represent.

The Commissioners who have been in Canada this year are: J. W. Ross, China; B. S. Webb, Argentine Republic; D. H. Ross, Australia; W. J. Egan, South Africa; W. A. Beddoe, New Zealand; G. B. Johnson, Brazil; Harrison Watson, United Kingdom; J. E. Ray, Manchester, Eng.; Phillippe Roy, France; and Hon. Raymond Hubbard, Siberia.

In order that we may link these Commissioners with the development in trade between Canada and the countries in which they are located, the exports of Canadian produce in the fiscal years ending March 31st 1914 and 1919 are produced below:

	Exports.	
	1914	1919
United Kingdom	$222,300,000	$532,900,000
Australia	4,700,000	14,000,000
New Zealand	1,900,000	6,200,000
South Africa	3,800,000	12,000,000
Argentine Republic	2,100,000	4,600,000
Brazil	800,000	4,000,000
China	500,000	2,900,000
Russia	1,400,000	6,200,000
France	3,800,000	96,100,000
	$241,300,000	$678,900,000

It will be observed that there are enormous increases and in respect to this development the Commissioners have played a very important part. While in some cases these increases are in part due, undoubtedly, to war business, in the case of the United Kingdom, New Zealand, Argentine Republic and Russia, figures for the six months subsequent to March 31st indicate a still further improvement. This signifies that the impetus which our trade has gained through war business is likely to continue. Australia, South Africa, Brazil, China, and France, show a slight falling off.

The Association's facilities at all Branches have been placed unreservedly at the disposal of and have been taken advantage by practically all these Commissioners. With the exception of the Commissioners from Brazil, Manchester, France, and Siberia, they have toured the country from coast to coast. Meetings in some cases have been arranged and explanatory addresses given, but the most fruitful results have been attained from personal interviews. Our members within convenient reach have been notified, interviews arranged, and plants visited. It may be said, due to the nature of the export business, that probably the greatest interest on the part of our members was evinced in the South American, Australian, New Zealand, and South African fields. Messrs. Webb, Egan, and D. H. Ross spent about one month each in Toronto and Montreal, the other Commissioners being able to cover the ground in less time. They made proportionately shorter visits in Amherst, Hamilton, Winnipeg, and Vancouver, where our Secretaries were instrumental in placing them in touch with members. In addition to this they visited many of the smaller cities.

Visits have been Opportune

Having regard to the importance of developing trade abroad, the visits of these Commissioners have been particularly opportune. The publicity gained and interest aroused have fitted in most admirably with the growing desire upon the part of members for foreign outlets and from these visits it is quite safe to say that a very large amount of new business will be developed.

The Commissioners are a unit in stating that direct representation is absolutely essential. It is quite impracticable to expect to develop business by correspondence when so much time is lost in the transmission of the mails and too many misunderstandings are likely to arise. Such a method serves rather to prejudice business than to develop it.

Emphasis was laid upon the necessity for consistent support of all agencies appointed. Export trade should not be

considered as a stop-gap to take care of periods of depression in the home market. Failure to keep up a continuity of supply embarrasses the agent and discredits the exporter. All the Commissioners were agreed that the inauguration of preferential treatment by the United Kingdom would reflect itself in the development of Empire trade. South African markets, in which Japan has hitherto enjoyed a large trade, are now showing a prejudice against Japanese goods and agents of Japanese firms are trying to unload, and are taking on British connections instead.

Object to American Connections

The Commissioners from the Southern Dominions are most emphatic in their objection to Canadian factories attempting to deal through American connections. While the United States enjoys large trade in these markets there are many buyers who prefer to deal with Canadian houses. The imperial sentiment thus manifested is not encouraged, while inquiries addressed to Canadian houses are answered through head offices in the United States or by United States exporting agencies.

With particular reference to South Africa, Australia, and New Zealand, it should be borne in mind that, as Commissioners are the only official Canadian representatives there, their offices become to some extent somewhat diplomatic and in consequence much depends upon the relationships which they may develop with the members of the Governments and other public officials. These relationships may have important results in respect to the further extension of preferential treatment and the improvement of transportation conditions.

The Commissioners are in a particularly good position to procure confidential information in respect to the business integrity and financial capacity of agents and importers in their territories and Canadian exporters are well advised in consulting them and keeping in constant touch with them.

The Commissioners have all expressed themselves as particularly well pleased with the facilities placed at their disposal by our Secretaries and the attention paid to them.

Mr. Dalton, the Secretary of the Pacific Division, whose report upon the Commissioners' visits is most complete, brings up a matter of immediate and pressing interest to the shippers at the coast; i.e., the establishment of a better steamship service between Vancouver and South Africa on the one hand and Australia and New Zealand on the other. These matters have been the subject of discussion between Mr. Dalton and Messrs. Egan, Rose and Beddoe, so that with the work they may do upon return to their own territories the object sought may be more rapidly advanced. Mr. Dalton's report upon this phase is of such importance that it is reproduced herewith.

In conclusion the opinion is expressed in respect to those of the staff who have come in contact with the Commissioners of a wholesome regard for their business ability and the importance of the service they are in a position to render has been firmly established. In respect to those of our members who have met them, much information of value has been exchanged and in many cases arrangements for representation effected. In respect to the Commissioners themselves they have seen the development in the capacity of our plants during the years since they were last here and are able to go back to their posts and advance our interests with a confidence that is borne of a close and intimate personal touch.

Extract from the Report of Mr. Dalton

In regard to trade with South Africa, there is a vast field in that country for the manufacturers of this Province, but very little can be accomplished in that direction until we have a direct steamer service from this coast to South African ports. The general run of manufactured articles which could be exported to South Africa must now be shipped by rail to the Atlantic seaboard, and thence by steamer, and no commodities, such as knitted goods or boots and shoes, which we make here and for which there is a demand in South Africa, can stand a rail charge of $4 or $5 per 100-lbs. and hope to compete with Eastern Canadian or American manufactures.

Large quantities of box shooks are now being shipped from this Province to South Africa via Southern American Atlantic ports, but a much larger business could be done were there a direct line of steamers from here. British Columbia lumber has been sold for a great many years in South Africa, but only in cargo lots, but a much greater volume of lumber will move from here to that country when we have direct steamship service, and manufacturers are consequently able to ship in less-than-cargo quantities.

Two of the officials of the Canadian Mercantile Marine are now on this coast, and from interviews with them it is reasonable to expect that we will before many months have the desired steamship service. The principal obstacle to the establishment of this service is the lack of return cargo from South Africa to this coast, but this is a matter which Mr. Egan has in hand, and he is going thoroughly into the same immediately on his return to Cape Town, and I am optimistic that this difficulty will be overcome.

Preference for Australia

In regard to trade with Australia and New Zealand, there is already, as you know, a very large volume of business being done between Canadian ports and those countries, particularly with New Zealand. Canada enjoys a trade preference in both South Africa and New Zealand, and negotiations are now under way for the establishment of a similar preference in Australia. Such a preference would be of direct benefit to Canadian manufacturers in meeting American competition in Australia.

The Canadian Mercantile Marine officials referred to above have announced definitely their intention of placing four 8,100 ton steamers on the route between here and Australia and New Zealand, which will give us a monthly service, commencing in January. Up to the present, there has been but one line of steamers from British Columbia ports to Australasia, viz, that operated by the Union Steamship Company of New Zealand, and these steamers are heavily subsidized by the New Zealand Government, on the understanding that preference would be given to New Zealand shipments, both inwards and outwards. This arrangement means that it is not always easy for those interested in making shipments to or from Australia to secure space. There is every reason to believe that the establishment of the Canadian Mercantile Marine steamers on this route will alter this condition.

Messrs. Beddoe and Ross have taken the keenest interest in the establishment of this Canadian line of steamers as the additional tonnage this will give to their territories will naturally greatly facilitate their efforts to establish Canadian products in Australia and New Zealand.

A cleaning house, 50 x 50 feet, with a capacity of 2,000 bushels of flaxseed per hour, is being erected by the Dominion Linseed Oil Co., St. Boniface, Man. In connection with the cleaning house there is a warehouse and track shed. The cleaning house is being erected to separate wheat and oats from the flaxseed. The whole mill has a capacity of 50 barrels per day of linseed oil, besides oil cake.

Advertising Canada in Motion Pictures

The Story of How the Exhibits and Publicity Bureau of the Department of Trade and Commerce, Ottawa, is Spreading Broadcast Throughout the World by Means of Motion Picture Films, the Gospel of Canada

By RAYMOND S. PECK

Editor of Films, Department of Trade and Commerce, Ottawa

FEW people in Canada realize to what extent motion pictures are being used by the Federal Government to advertise the Dominion, and spread Canadian publicity broadcast throughout the entire world. Therefore a resumé of what the Exhibits and Publicity Bureau of the Department of Trade and Commerce, Ottawa, has done, and is doing, will, perhaps, come as a pleasant surprise to many prominent Canadian manufacturers and business-men.

This bureau was established in January, 1917, and since that time has grown with amazing rapidity. The bureau now occupies the entire Arnold Building at Kent and Wellington Streets, Ottawa. Here will be found commercial exhibits, purchased by the various trade commissioners, covering products which are imported into the countries in sufficient quantities to warrant the investigation of the trade by Canadian manufacturers.

A Finely Equipped Laboratory

However, the greatest and most amazing growth of this new Government Bureau has taken place in that section of the work given over to the production of motion pictures. Here will be found the finest equipped motion picture laboratory in Canada. The most modern equipment and methods are used in the manufacturing of film, with the result that a new standard has been set by this bureau for motion picture production in Canada. When moving picture scenics, industrials and educationals, were being made of such high excellence, it was not long before they attracted the attention of prominent American and Canadian film executives, anxious to secure these series of pictures and exploit them in the moving picture theatres of America on a percentage basis. Ont by one various contracts for the distribution of this series were made, until to-day these Canadian Government films enjoy a world-wide circulation.

In Canada these Government films are shown from coast to coast through the film exchange system operated by the Canadian Universal Film Co., Limited. Invariably they secure "first run" in the best theatres in the leading Canadian cities. In the United States they are shown throughout the length and breadth of the great Republic through the Goldwyn Picture Corporation, and the First National Exhibitors' Circuit, two of the dominating film exchange systems of that country. A contract has also been recently closed by the Government, with Sir William Jury, one of Britain's leading theatrical magnates, whereby he secures the British and European exhibiting rights for these Canadian scenics, industrials, and educationals. Arrangements have also been effected whereby the pictures will be shown regularly in the representative theatres of Australia, New Zealand, South Africa, and other foreign countries where Canada has trade commissioner representation.



A snappy scene from the film, "Wooden Shipbuilding in Canada," showing logs striking the water at the foot of a chute

Circulation Girdles the Globe

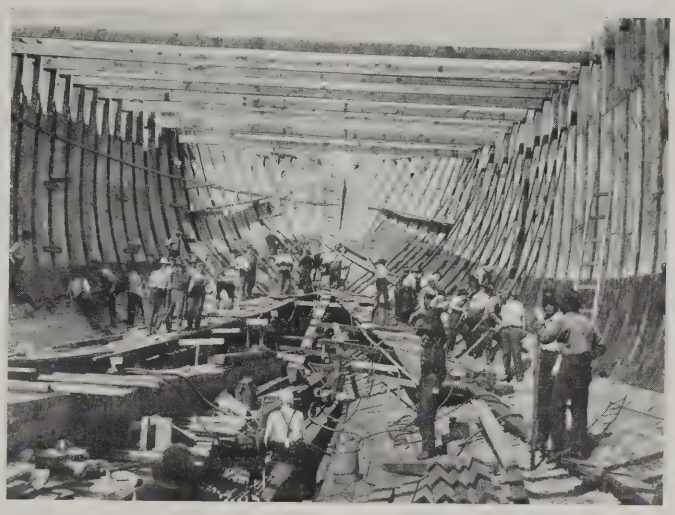
It can be readily understood from these facts concerning distribution of these films, that the circulation is world-wide and girdles the globe! And this tremendous circulation is not spasmodic. Every other week the Exhibits and Publicity Bureau sets into circulation one complete reel. Thus, by means of this bi-monthly release schedule, there is a steady and ever-increasing flow of Canadian propaganda being sown broadcast throughout the globe. The motion picture speaks a universal language. Truly Babel crumbles before the motion picture screen! The motion picture has rightly been termed the World's University, and one prominent British statesman has called the screen "the blackboard of the future."

Some conception of the tremendous growth of the motion picture interests can be grasped, when it is stated—and truthfully so—that it is now America's Fifth Industry! Lloyd George has said of the film industry: "I desire to express to the film industry of Britain my sincere appreciation of their effort to help the Government during the war. Your theatres are not only recognized places for the amusement of the people, but the film is a powerful force for the education of the people to a rational, happy and peaceful mode of living and working." Recently the Exhibits and Publicity Bureau produced a reel of film which was titled "Peace Hath Her Victories," and dealt with Victory Year at the World's Greatest Annual Fair—the Canadian National Exhibition. The subject was treated as a national achievement that Canadians could well be proud of. This film is now being shown throughout Canada, and a copy has already been sent overseas to Sir William Jury's film company for British and European distribution, while the United States will soon have its copy! Thus the message of Canadianism is carried throughout the entire world.

Probably the outstanding feature of this series of "Seeing Canada" reels, from a film executive's viewpoint, is the high grade of workmanship and artistry achieved and maintained. Competent film critics have

stated that these films can be classed with the finest of similar film products being produced anywhere. An American who occupies a responsible executive position in the Canadian film area pronounced the "Algonquin Park" picture—a recent mid-summer release, the finest scenic he had ever seen, and was anxious to play it again in his theatre in Toronto—which is a precedent for a one-reel scenic film!

It is largely through the high standard of production that the bureau has been able to get such tremendous circulation, because film men have had no difficulty in merchandising the product to the exhibitors or owners of theatres, both here and abroad, at a good rental figure.



Another scene from the film "Wooden Shipbuilding in Canada," showing small army of workmen in hull of a ship

Another phase of the work of the bureau is the showing of these pictures from time to time, before gatherings in schools, churches, community centres, rotary and kindred organizations and boards of trade and other civic bodies. A lecturer is constantly employed by the bureau in this work, with Canada as his "stamping ground." A prominent Canadian business man, who is the executive head of a large organization said: "I was a Four-Minute Man during the bond campaigns, and in that experience I discovered the wonderful power that films have for visual instruction—something which I had always under-estimated!"

The purely amusement end of the film business had reached powerful proportions. I firmly believe the next great development in this Fifth Industry will be along commercial and educational lines. Already the movement in that direction has set in, in a manner that is most pronounced. The certain demand for films for non-theatrical purposes is growing larger every day, and the market is very barren of good material to meet that demand. The demand comes from churches, schools, associations, institutions, and industrial organizations, not alone in Canada, but throughout the world. The Dominion of Canada has most certainly taken a prominent lead in this work, through its Exhibits and Publicity Bureau of the Department of Trade and Commerce. In days gone by tons of immigration literature and propaganda in all forms have been scattered over the Seven Seas—but now the narrow strip of celluloid film, barely more than an inch wide, is winding itself round and round this old globe of ours, and tightening its hold more than ever on the great masses of the world's inhabitants. Canada is taking a prominent part in getting a strangle-hold on the world's attention by means of motion pictures!

Progress Towards Uniformity of Legislation

By H. MACDONALD

Secretary, Legal Department, Canadian Manufacturers' Association

IT has long been generally recognized that the independent action of the various provincial legislatures has resulted in a diversity of legislation which, especially with regard to commercial law, raises a serious obstacle to commercial intercourse between the different parts of the Dominion, and is a source of embarrassment to British and foreign merchants doing business in Canada. In the United States, where a similar, but perhaps more complicated situation exists, work of great value has been done by the "National Conference of Commissioners on Uniform State Laws." For the past twenty-eight years, these commissioners have met annually and have drafted various uniform statutes and the subsequent adoption by many of the state legislatures of these statutes has secured a substantial measure of uniformity on various subjects.

The obvious benefits resulting from the meetings of the state commissioners in the United States suggested the advisability of similar action being taken in Canada, and on the recommendation of the Council of the Canadian Bar Association, several of the provinces passed statutes providing for the appointment of commissioners to attend a conference of commissioners from the different provinces, for the purpose of promoting uniformity of legislation in the provinces. The Canadian Manufacturers Association has long evinced a deep interest in the subject of uniformity of provincial laws and has kept in close touch with the work of the commissioners, with a view, as far as possible, to submit practical suggestions from time to time, which would not only be of assistance to the commissioners but of special benefit to Canadian manufacturers.

The first meeting of the commissioners appointed under these statutes and of representatives from those provinces in which no provision has been made for the formal appointment of commissioners, took place in Montreal on the 2nd day of September, 1918, and at this meeting the "Conference of Commissioners on Uniformity of Legislation in Canada" was organized. Although the work of the commissioners at their first meeting was necessarily of a tentative and preliminary character, provision was made for the consideration of various subjects by committees during the ensuing year.

The second annual meeting of the conference took place in Winnipeg on the 26-29th August, 1919. Several sessions were devoted to the consideration of drafts of model statutes, relating, *inter alia*, to the following subjects: Bulk sales, conditional sales, fire insurance policies. The conference also considered and adopted the report of its committees on the following subjects: Legislative drafting, sales of goods, and partnership.

The English Sale of Goods Act, 1893, has been adopted in New Brunswick and Prince Edward Island as a result of the first meeting of the conference. This statute is now in

force in all the provinces of Canada except Ontario and Quebec. The English Factors Act, 1889, has also been adopted in New Brunswick, and is now in force in six provinces.

It should be remarked that the appointment of commissioners, who receive no remuneration for their services, does not bind any province to accept any conclusions arrived at by the conference, and that such uniformity of legislation as may be secured by the conference will depend upon the subsequent voluntary acceptance by the provincial legislatures of the recommendations of the conference. It will be obvious, therefore, that the Legislation Committee of the Canadian Manufacturers Association has a very important function to discharge in carefully studying such legislation and submitting to the various provinces relevant considerations for its adoption, where such may appear to be of special benefit to the manufacturers.

Canada's Pressing Fuel Problem and a Way Out

By LOUIS SIMPSON
Member C.M.I. and A.E.S., Industrial Engineer

FEW manufacturers, at any rate amongst those operating in Eastern Canada, appear to have realized the serious position at present existing, as regards the present and future supply of fuel.

Writers, in discussing this question, have not made sufficiently clear the fact, well known to those who have made a study of Canada's fuel supply, that whilst Canada may possess an unusually large proportion of the world's still stored wealth of coal, such coal is often so located, and much of it is of such a quality, that it is of no practical use at this time.

Canada's supplies of useable coal are found in the far east or in the far west of the Dominion. The cost of transportation limits the distribution of this coal. None of it is carried into the Province of Ontario, only a small quantity is brought into the manufacturing sections of the Province of Quebec.

Of the coal, known to exist in the east, 70 per cent. is under the waters of the Atlantic, and, therefore, can only be mined at a greatly enhanced cost. One company owns a large portion of this coal field and uses a very considerable portion of its output for its own use in metallurgical operations.

The coal of the middle west provinces of Canada is largely lignite, and, because of its peculiar characteristics, can only be used as fuel under certain conditions, which conditions are not present in the provinces of Ontario and of Quebec. The manufacturers of the Province of Ontario are entirely dependent, and the manufacturers of the Province of Quebec are very largely dependent upon supplies of coal imported into Canada from the United States.

These supplies, owing to labor troubles in the States, are now cut off. When once more available, they will only be available at a price much higher than has hitherto been paid, a price immensely higher than that paid before the war.

Not only does the cost of fuel directly affect the cost of production, but also indirectly, because it increases the cost of living, and so far has compelled, and will continue to compel, the work people to demand high wages.

These are the bald facts, plainly stated.

The possible and probable stoppage of industries through lack of fuel and the distress caused by an inadequate supply of fuel during the cold winter months, are matters of unusually serious moment.

The future high cost of fuel will, of necessity, increase the cost of transportation, and the Canadian manufacturer seems likely to have to face a handicap the like of which he has never before experienced. It is estimated that the Canadian railways burn one half of the soft coal used in Canada; also that the bunker requirements (that is coal used by steamships, etc.), is 2,000,000 tons per year.

The consumption of coal by the railways, might, with advantage, be appreciably reduced by the electrification of certain of Canada's main lines of railways, but such electrification would take considerable time to effect, and then could only be done with a very large expenditure of capital.

It has been advanced that, by exploitation of the peat bogs of Canada, the fuel shortage might be ameliorated. Let not the fuel question, as a whole, be thus camouflaged. The influence of any peat fuel that may from time to time be marketed will, at the best, be slight and local, and will affect the consumption of hard coal, rather than that of soft coal. Further, it has not yet been proven, although lots of money has been expended in trying to prove it, whether the recovery of peat under Canadian climatic and labor conditions can, to any extent, be economically undertaken. The writer is fearful that the labor conditions in Canada will prevent (apart from other troubles, such as cost of transportation) the marketing of any considerable quantity.

The Dominion Government and certain Provincial Governments have been spending large sums of money in the endeavor to produce from the lignites of central west Canada, a commercial fuel. The results up to date are by no means conclusive, though it is probable that a way will eventually be formed to reach the desired end, but such results can only indirectly aid the manufacturers of Ontario and Quebec.

It is evident, therefore, that a most serious condition of affairs exists, and that the endeavors of the Governments to ameliorate those conditions have, up to date, been more or less failures. It is probably too much to expect politicians to keep themselves posted and up to date in the continued progress made by science, but such an excuse cannot be fairly advanced by the Honorary Advisory Council of Scientific and Industrial Research, in whose hands the Dominion Government placed the direction of the work undertaken upon the lignites. The position of Canada's fuel supply being as indicated, it has seemed surprising that the above-mentioned Council has not called the attention of the public and of the Government to the known and admitted advantages of liquid (oil) fuel. Such fuel can be obtained by retorting the oil-yielding shales, which are to be found amongst the undeveloped natural resources of all the provinces of Canada, and their development and education would have provided a speedy and certain solution of the present and future difficulties.

This article is written for the purpose of discussing the question of fuel supply, but it is only right to state that the Government and also the Advisory Council have had their attention called to the possibilities of this proven supply of liquid fuel, and that on several occasions the Senate passed unanimously a resolution calling upon the Government to take immediate action, with a view of securing the prompt development of these undeveloped national resources, and that neither Government nor Council have done anything.

It is seldom realized that the cost of fuel does not consist, alone, of the money paid for the fuel delivered, but that the cost is the total of several charges of which the cost

delivered is only a part, and though in some cases it may be the major part, yet in others the money paid for labor (which the use of liquid fuel materially reduces), and for storage (the cost of which is also reduced), may be important factors.

Again, when comparing the respective values of different fuel, it is too often overlooked that, whilst a laboratory test may or may not give a true record of the number of British Thermal Units (a measure of heat contained in the sample tested) present in one pound of fuel, with coal, it does not follow that the total B. T. U. in one ton is the product of the B. T. U. multiplied by the pounds contained in one ton. With liquid fuel (oil) such a calculation would be correct, but with coal incorrect, because coal nearly always contains an unknown, but certain, quantity of incombustible rock, the quantity of useless material being more, now, than before the war.

Again, ignoring the certain presence of this rock, the B. T. U. ascertained to be in the coal when compared with the B. T. U. ascertained to be found in the liquid fuel (oil) does not correctly establish their respective values. Under certain known conditions, that too often are found to exist when burning coal, only 20 per cent. of the contained heat units are utilized, whereas, with liquid fuel, 75 per cent. have given useful results. It is evident, therefore, that even were the cost of the heat units contained in the liquid fuel to be greater than that of those contained in the coal, yet because of the increased efficiency obtainable, the liquid fuel would be the more economical fuel. That the many advantages possessed by liquid fuel are at last beginning to be recognized is evident from the action of the U.S.A. Government, who, when building their new merchant marine, adopted liquid fuel. Sir George Hunter of the British Shipbuilding firm of Swan & Hunter, has also lately stated that in his opinion, within two years, all the Trans-Atlantic steamers would be using liquid fuel. It will, doubtless, be asked, why has not liquid fuel been more largely used in Canada than has been the case, up to date. The answer is understandable and to the point and is: Because the benefits that the use of liquid fuel assures have not been understood by the users of fuel, and, also because liquid fuel of the desired quality has not, up to date, been obtainable in Canada, in sufficient and in assured quantities.

Such liquid fuel as has been available, in eastern Canada, has been a by or waste product of oil refineries. It was the refuse from certain operations. It varied in character, according to the quality of the crude oil being fractionated and refined, and according to the process of refining used. Too often it contained a great excess of sulphur, and also of water. It was a *most undesirable product*, and must not be taken as a sample of an up-to-date fuel oil, such as would be accepted by the British Admiralty.

It will naturally be asked why was not the desired quality of fuel oil obtainable? The answer is also understandable: Because, through the persistent refusal of the Dominion Government to permit those, who possessed the necessary capital, and who were prepared to invest in this new industry, to import into Canada the required machinery and material, without having to pay duty and war tax, totalling generally 42½ per cent. upon the cost, capitalists have refused to find the money required.

As the cost of recovering the oil from oil-yielding shales consists largely of interest and depreciation (after payment of wages and taxes), chargeable upon the cost of the works, that will have to be erected, it is evident that the imposition of import duty and war tax, as above stated, is an insurmountable deterrent. During the war the investment of no less than $5,000,000 was lost to Canada, because the U.S.A. capitalists refused to invest under such conditions. They pointed out that for the privilege of establishing a new industry in Canada, the Government were demanding from them a payment exceeding $1,250,000 and that before their capital was given the opportunity of earning one cent.

It is greatly to the interest of all Canada that not only should the shale deposits, rich in oil, be worked, but also those comparatively lean in oil. The cost of the plant is the one governing factor. It is only by keeping the cost of the several plants within certain limits that beds of shale lean in oil can be profitably worked. It is evident that this possible new industry has been unduly and improperly and very unwisely discriminated against. Canadian manufacturers must have fuel, else they will have to close down their works. It should be made possible for Canadian manufacturers to purchase the fuel they require, and that fuel should be of a good quality and should be obtainable at a reasonable cost, otherwise how can they compete? If ever an industry, at its inception, deserved encouragement, it is this proposed oil shale industry, yet the history of the past eight years gives evidence of a persistent system of discouragement.

It may or may not be news to the readers of INDUSTRIAL CANADA, but it is well to place on record the fact, that through recent inventions, it is now possible to use fuel oil, if of the right quality, in the place of hard coal for domestic purposes, and that such substitution would effect a considerable economy. All that is now required is the supply of oil. If this oil is not now in supply, the fault lies with the Government.

The following statement may be of interest:

1. Fuel oil contains about double the heat values contained in soft coal.
2. It can be delivered, stored and used at a less cost for labor.
3. Its efficiency, upon combustion, is very much higher than that of coal.
4. The capacity of boilers and heaters using fuel oil is greatly increased.
5. When used, there are no cinders or dust to remove.
6. When used, the repairs to boilers and furnaces are less.
7. Whilst, in some cases, it will entirely eliminate the need of hired labor, in all cases, the labor will be greatly reduced and should cost less.
8. When used the steam pressure can be kept constant.
9. Tall chimneys will no longer be needed.
10. Smoke nuisance, with its accompanying cost to the public, would cease.

At present Canada is importing, and has to pay for, nearly $100,000,000 of fuel (coal) and oil. Now that the strike in the United States seems likely to be ended at the cost of an increase in the price of coal exceeding $1.00 per ton, the total mentioned may be exceeded. Would it not be greatly to the advantage of Canada, and certainly to the advantage of every manufacturer in Canada, were this enormous sum kept in Canada, and circulated therein? Then business would boom. Manufacturers, what are you going to do about it?

Nova Scotia Conference

Important Gathering of Business Interests of the Province to Discuss Development Policies

The Head Office is advised by H. R. Thompson, secretary of the Maritime Division, that a big Provincial Conference for Nova Scotia was held in Halifax on December 3 and 4 to discuss proposals for the promotion of provincial interests. On the agenda were such important matters as the organization of a world's fair for Nova Scotia; the practicability of a world's industrial conference as a means of advertising the province's resources; the improvement of transportation facilities; the importance of better highways and the development of water powers. A report of the conference will be published in the January issue.

Value of the Canadian Industries Exhibition

First Time an Exhibition Confined to the Products of One of the Overseas Dominions Has Ever Been Held in England—Canada's Future in World Markets Depends Upon the Energy and Enterprise of Her Manufacturers

By J. M. McINTOSH
Manager, Trade Sections Department, C.M.A.

LLOYD HARRIS says that the greatest thing he did in London was to discover the British Empire and, when he said that, he was not talking in geographical terms but in terms of trade. Everybody knows that the red patches on the world's map are the measure of the Empire's extent, but we are only commencing to learn what they buy and sell.

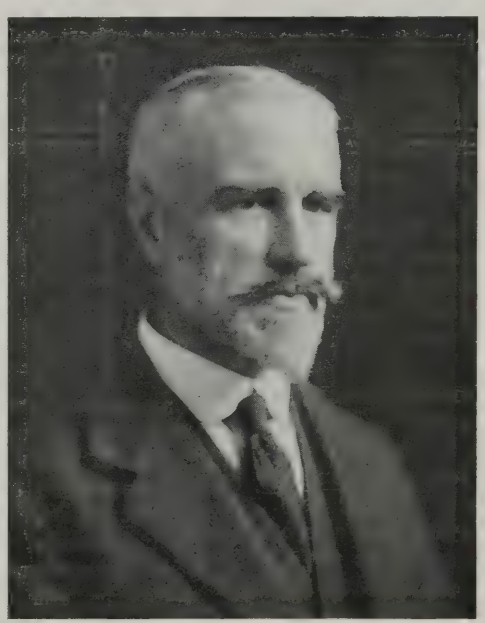
Canada's place in the Empire trade will depend upon the enterprise and boldness of its traders. Opportunity is knocking at our doors. Everything we have offered for sale abroad has been snapped up and answered with demands for more. Canadians seem to be suffering from an overdose of being surprised at themselves. The fighting ability of Canadians has been proven, but nobody would have believed that we could raise, equip, transport, and maintain an army of half a million until we did it. Nobody would have thought we could manufacture war supplies in tremendous volume until we did it. When the Finance Minister asked us for a loan which we thought would tax us fairly heavily, we came through with twice the amount. Having done these few odd things, what is now left for us to do is to get busy and complete the job by producing in proportion to the markets of the world, which are open to us.

Mr. Harris has told us plainly that millions of dollars worth of business might have accrued to Canada had we been on the spot with our salesmanship and samples. The only way to get business is to go out after it, and if we do not go after it there are others who will.

Mr. Harris has covered his missionary work with a boldness and enterprise which should be characteristic of every Canadian manufacturer. If we indicate that same spirit, results will follow which will make us still further surprised at ourselves.

Were this not coupled up with something practical it might be considered as so much hot air, but the practical part of what we are getting at is to impress upon our manufacturers the value of the Canadian Industries Exhibition in London, England, next June, as a medium for meeting British buyers and distributors to all parts of the Empire.

The Royal Agricultural Hall is one of the largest exhibition buildings in London, and is situated in the heart of the city. It is principally used for exhibition purposes, and the path to it is well worn by buyers of all classes of goods. Mr. Greville Montgomery, whom Mr. Harris has introduced to the Association, is well known as a former member of the British House of Commons, and as the promoter of the biggest exhibitions now controlled by any public company. The Building Trades Exhibition, held biennially, is the largest trades exhibition in the world, and is visited by interested persons from all parts of the British Isles. He is also responsible for the Mining Exhibition, Textile Machinery Exhibition, and Rubber Trades Exhibition. The business which these shows develop would make you dizzy.



Mr. H. G. Montgomery
Promoter of the Canadian Industries Exhibition, London

The Exhibition will be advertised throughout the United Kingdom in trade and daily papers, the use of posters on hoardings and in railway stations. The fact that this will be the first time that an exhibition confined to the products of one of the overseas Dominions has ever been held in England will insure a large attendance.

If Canadian manufacturers will invest a few hundred dollars and go there with their samples, set them up attractively place them in charge of their nicest salesmen, and follow up everything that looks like business, we won't be worrying very long about adverse trade balances.

Great Britain, the clearing house of the Empire, if not at present of the world, has at last committed herself to Imperial Preference. Canada has had the latch string hanging out for years, but it took the rude jolt of war and post-war conditions to bring the Mother Country into line. It will, however, avail nothing if we do not go to her and show that we can supply her wants. Having just borne the brunt of the European mix-up, she may at present be a little short of cash, but her promises to pay are gilt-edged.

Large scale production is the most potent competitive factor which Canadian manufacturers have to meet. If the cultivation of our home market does not provide an outlet sufficiently large to enable us to produce on a scale which will put us on an even keel with our competitors, it is obvious that we must cultivate other markets that will, else we may lose out in our home market the most valuable of all. There is nothing to be gained from watching the movements of competitors and following in the swim. Trade may follow natural channels, but when you come to analyze the channels you will invariably find that a good deal of digging deflected the course in the direction of those countries where traders were bold, enterprising, and far-sighted. Our industrial history has never yet presented such splendid opportunities. Our future in the world's markets places upon our manufacturers of to-day demands which cannot be met by limiting our capacity and vision to home market needs.

Canada's Industrial Expansion

A Record of Progress

NOVEMBER'S story of industrial growth proceeding in all parts of the Dominion is duplicated and made all the more emphatic by the record for December. Again there is the same account of new industries being established, existing industries being extended and new products being produced. The movement is quite general and apparently is not confined to any special lines of industry. It bespeaks a confidence in the industrial outlook, which will go a long way towards stabilizing business conditions.

Established Branch Plant

The Eclipse Rubber Co., Limited, Are Now Manufacturing Waterproofs in Victoriaville, P.Q.

A branch plant of the Eclipse Rubber Co., Limited, Montreal, has recently been located in Victoriaville, P.Q. They have rented a building for the purpose and now have about 65 employees, manufacturing waterproofs. The industry is progressing satisfactorily and the management are well satisfied with conditions as they are to date. They propose later to enlarge the plant.

Furriers Erect Building

Seven-Storey Structure Going Up in Montreal for Holt Renfrew & Co., Limited

A seven-storey building is being erected on McGill College Avenue, Montreal, by Holt, Renfrew & Co., Limited, the main purpose of which is to provide the most efficient fur storage. The building throughout will be a model of modern fur handling and is designed to improve the company's service in Montreal. It will be connected by bridge with the present retail store on St. Catherine Street and will contain all packing and shipping rooms, offices, cold storage room, factory and skin rooms, employees' dining rooms, etc.

Double Output of Tires

Oak Tire & Rubber Co., Limited, Have in Prospect Doubling Capacity of their Plant

The programme of the Oak Tire & Rubber Co., Limited, Oakville, manufacturers of "Royal Oak" tires, calls for the enlargement of their factory next spring by the addition of another storey, size 200 x 60 feet, which will enable them to double their present output. At the present time additional machinery is being installed to take care of the increasing demand for their product. About 90 hands are now on the payroll, and since April last the plant has been running 23 hours a day. An effort is being made to secure a portion of the export business in tires.

Enlarging Brewing Plant

British American Brewing Co., Limited, Are Building New Bottling Shop at Windsor

The British American Brewing Co., Limited, Windsor, who manufacture "Cincinnati Cream" beer, are at present carrying out a programme of enlargement which will increase their capacity considerably. They are erecting a new bottling shop, 140 x 70 feet, which will be equipped with the latest machinery at an approximate cost of about $75,000. They are also enlarging their present stock house and increasing its capacity by 5,000 barrels, equipping it entirely with glass-lined steel tanks. A new office is also being laid out in the second floor of the bottling shop. They state that business is very good and the addition will about double their capacity.

Lumber Co. Change

American Interests Take Over Mills and Limits of the Finger Lumber Co.

What is characterized as the biggest deal in the history of the lumber industry in Manitoba was the recent sale for approximately $1,500,000 of the lumber mills and timber limits of the Finger Lumber Co. of the Pas to C. J. and D. N. Winton, of Minneapolis. The Finger Lumber Co. was established in 1912 and has been in active operation since with an average production of 190,000 feet per day. The limits consist of 324 square miles. Mr. H. Finger, who established the company, has been a resident of the Pas since 1904 and for several years was mayor of the town.

Move Factory to Woodstock

Manufacturers of Sunkist Orange Marmalade Take Over Factory at Woodstock

The California Fruit Growers Exchange have removed their manufacturing plant from Toronto to Woodstock, where they have taken over the Tobin Arms building and are operating it under the name of the Exchange Orange Products Co. The plant is of sufficient size and is admirably suited for the manufacture of a food product. They have at present about twenty-five hands at work and will be the exclusive manufacturers of Sunkist orange marmalade for Canada. The Toronto factory was located at 105 King Street East.

Doubling Machine Shop

B. J. Coghlin Co., Limited, Montreal, Make Considerable Enlargement to Their Plant

By adding another floor to their machine shop, B. J. Coghlin Company, Limited, Montreal, manufacturers of springs, axles, track tools and railway supplies, will more than double the output of that department. The company moved to the present site in 1912, were obliged to put up



Plant of the Hoover Suction Sweeper Co. of Canada, Limited

This is one of the latest United States branch industries to locate in Canada, the plant being erected in Hamilton

machine shop in 1915. The new floor will be 75 x 125 feet, additional buildings within two years, and built their present of brick and steel construction with metal sash. Besides this addition they are putting in a large installation for fuel oil to give them more room in their forge shop by doing away with coal, which necessarily takes considerable floor space. They will probably extend this building next summer.

Extending Plant at Guelph

Gilson Manufacturing Co., Limited, are Enlarging Both their Foundry and Machine Shop

To take care of their constantly expanding business in their "Goes like Sixty" line of gasoline, gas and oil engines and other lines of manufacture, the Gilson Manufacturing Co., Limited, of Guelph, are making plant extension at the present time. To their foundry they are adding a building 70 x 90 feet, and to their machine shop, a structure 140 x 80 feet, two storey high. The two extensions will enable them to increase their output materially.

Envelope Manufacturers Build

Barber-Ellis, Limited, are Making Considerable Extension to their Factory in Brantford

Barber-Ellis, Limited, envelope manufacturers, whose factory is located in Brantford, Ont., are making a substantial addition to their plant. The present building is 300 feet long by 100 feet wide. The extension will be uniform with their building, 100 feet long by 100 feet wide and two storeys in height, making the factory 400 feet long. A portion of the addition will be devoted to an enlargement of manufacturing facilities while the balance will be used for additional stock warehouse room. The construction is of reinforced concrete with brick facing, and the work will cost about $75,000.

The Great Plant at Anyox

Immense Industry Now Being Operated by the Granby Consolidated M. & S. Company

Started during the war in order to provide a sure supply of coke for their smelter at Anyox, B.C., the huge by-product coking plant of the Granby Consolidated Mining & Smelting Co., has only recently been completed and now stands as a monument to the faith of this company in the mineral possibilities of British Columbia. In a description of the plant appearing in the November issue of *Iron and Steel of Canada*, it is explained that the entire installation is practically an all-British achievement There are 30 ovens in all, stretching over 200 feet and standing 20 feet high. Gases driven off are conveyed to the by-product house where many by-products are secured. The plant has a capacity of 500 tons of coke daily, while out of each ton of raw coal carbonized there results 65% of the total weight in coke, 11,500 cubic feet in gas, 10 gallons of tar, 21 pounds of sulphate of ammonia, 3 gallons of light oil, 1.55 gallons of benzol, .40 gallons pure toluol, 30 gallons solvent napthalene, and 4 pounds crude napthalene. From the tar there is made creosote, pitch and many other useful by-products. The plant is the most efficient of its kind in the world, the loss in conversion being reduced to a minimum. The total investment at Anyox approximates eight million dollars.

New Factory Completed

Plant at Hamilton of Hoover Suction Sweeper Co. of Canada, Limited, Now in Operation

There has just been completed at Hamilton the fine new factory erected by the Hoover Suction Sweeper Co. of Canada, Limited, the recently-organized Canadian subsidiary of the Hoover Suction Sweeper Co. of North Canton, Ohio. The plant has an original capacity of 125 sweepers per day. The building is two stories high, of the most modern type of factory construction, and the foundation and walls are so built as to permit the addition of the third and fourth stories when the time for expansion has arrived.

Hoover Electric Suction Sweepers will be manufactured complete in this factory, with the temporary exception of the electric motors, which will be made to Hoover specifications in Canada by Canadian manufacturers. The building contains 30,000 square feet of floor space and is equipped with the wide variety of machines, tools and equipment required in producing Hoovers.

Chief among the manufacturing operations in the construction of the Hoover is the casting of the aluminum housing in which the sweeper is encased. This requires a foundry of large proportions. And the foundry at the new plant is most complete and up-to-date. A metallurgist also is employed to make tests and to supply formulas for the exact alloys to be used to insure the best and strongest type of aluminum castings. Machine shops of sufficient capacity to finish these castings, together with equipment for making the motor-driven beating-sweeping brush, which is an essential and exclusive part of the Hoover, are in keeping with the original manufacturing demands. These shops can be expanded later, with the growth of the factory. There is a small forest of automatic screw machines, lathes, drill presses, punching and stamping machines, reamers, grinders



Enlarged Factory at Hamilton of Zimmerman-Reliance, Limited

During the past season the Company have added 30,000 square feet of space to the plant by addition of a third storey

and polishers in the machine shops to perform a variety of operations that require accuracy and high-grade work.

Other important departments are the bag-making department, the big assembly rooms and the testing and inspection departments that exist throughout the plant. All parts of the Hoover are thoroughly inspected and tested both before and after assembly, so that there can be no question as to the high quality of manufacture.

Thomas F. Kelly is sales manager of the company, and is now building up a competent force of sales representatives in every large city and in most of the smaller cities and larger villages in the Dominion. The general offices are located at Hamilton in the new building.

Another Floor Added

Zimmerman-Reliance, Limited, Gain 30,000 Square Feet of Additional Space at Hamilton Plant

Through the recent addition of a third floor to their plant in Hamilton, Zimmerman-Reliance, Limited, have secured 30,000 square feet of additional floor space. With the exception of a room 80 x 80 feet at the front of the building, the entire floor will be devoted to the manufacture of hosiery, a new line for this plant. The front room is being fitted up in an up-to-date manner as a recreation and lunch room for employees and will no doubt be appreciated by the help.

Zimmerman-Reliance, Limited, represents an amalgamation of the Zimmerman Manufacturing Co. of Hamilton and the Reliance Knitting Co. of Toronto. The former was organized by Mr. A. F. Zimmerman in 1905 and specialized in balbriggans. The latter was organized by Mr. F. R. Sweeney in 1903, to make sweaters. The plants of the combined companies now contain over 160,000 square feet of floor space and employ 700 hands. Capacity is 1,000 dozen underwear, 1,000 dozen hosiery and 150 dozen sweaters daily. Mr. F. R. Sweeney is president; Mr. A. F. Zimmerman, vice-president and general manager, and Mr. A. B. Couch, sole selling agent of Zimmerman-Reliance products.

More Manufacturing Space

Knitted Goods Factory in Stratford is Being Very Considerably Enlarged this Year

Before the end of the year R. M. Ballantyne, Limited, manufacturers of knitted goods, Stratford, hope to have the addition to their factory, recently under construction, completely equipped and ready for operation. The addition is a building 125 x 89 feet, two storeys and basement, of mill construction, and will add 50 per cent. to total floor space and 100 per cent. to manufacturing floor space. It has been erected for the purpose of relieving congestion in the present factory, bettering working conditions and enabling the company to instal additional plant to take care of increasing business. The staff has been increased 50 per cent. during the past two years and a considerable number more employees will have to be taken on during the next year to provide for the greater output demanded.

Coating Mill Enlarged

Pressure on Finishing Room at Georgetown Coating Mills Has Necessitated Some Relief

The Provincial Paper Mills Co. are at present building two additions to their coated paper mill at Georgetown, Ont., in order to relieve the pressure on the finishing department. An extension is being made to the finishing room, 80 x 90, two storeys high, and a new color room, 40 x 80, two storeys high, is also being erected. Both are of concrete block construction, similar to the main building, and were to be ready for occupancy by about December 1. The company report heavy orders which have been causing serious congestion in the finishing end. At other mills no changes are at present contemplated, but plans are being prepared for the erection of the first paper mill unit at Port Arthur.

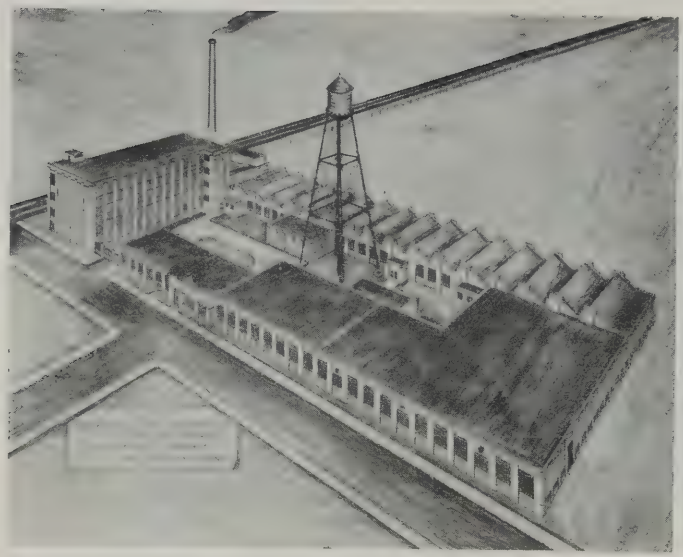
Grinding Wheels

The Norton Company of Worcester, Mass., are Establishing a New Industry in Hamilton

A plant for the manufacture of grinding wheels for the Canadian and British trade is at present under erection in Hamilton by the Norton Company of Worcester, Mass., a Massachusetts corporation with a capital of $9,000,000. The site of the plant is a tract of four acres at the corner of Lottridge St. and Beach Road, which the company have purchased from the Hamilton Bridge Works Co., Limited.

Only a few units of the projected plant will be erected at present, and these will be completed about February 1, whereupon the production of vitrified and silicate grinding wheels will be commenced. These will be made of alundum abrasive and crystolon abrasive, the former an aluminous abrasive made by the company from bauxite at electric furnaces at Niagara Falls, N.Y., and Chippawa, Ont., the latter an artificial abrasive chemically known as carbide of silicon, manufactured in electric furnaces at Chippawa, Ont.

The Hamilton industry will be operated by the Norton Company of Canada, Limited, a subsidiary corporation with a capital stock of $500,000, and the original units with their equipment will give employment to 60 men. The local or-



Nearly Ready for Operation

A bird's eye view of the fine new plant at Hamilton of Porritts & Spencer, Canada, Limited

ganization at Hamilton has not yet been decided upon, but the officers of the Canadian corporation will be to a great extent identical with those of the parent company. The Norton Company are the largest manufacturers of grinding wheels in the world, and their decision to make their product in Canada is an important development. The company also manufacture refractories and non-slip tile.

British Branch Industry

Plant of Porritts & Spencer, Canada, Limited, at Hamilton, is Now Nearing Completion

About three-fourths of the work on the plant being erected in Hamilton by Porritts & Spencer, Canada, Limited, is now complete and early operation is anticipated. This interesting development, which involves the location by Messrs. Porritts & Spencer, of Bury, England, of a branch factory in Canada, has many points of interest. The plant was designed in Hamilton by P. M. Smith, Vice-President of the W. J. Westaway Co., Limited, textile mill engineers, and was built by Hamilton contractors with local labor and building supplies. The first unit, as illustrated, forms a hollow square, which if straightened out would be over 1,000 feet in length. The structures are largely one-story, except the storehouse, which rises to four stories. About 90,000 square feet of floor space is provided. Construction is standard slow-burning mill construction and reinforced concrete. The largest unit, the spinning and weaving building, is 60 x 360 feet, one-story, with saw-tooth roof. It will be heated by a novel system of forced hot-water circulation and will be equipped with automatic sprinklers throughout. Ample provision has been made for expansion both in laying out the plant and in the choice of building site, as the present structures only cover about one-third of the eight acres of land owned by the Company. The product will at first be paper-makers' felts, but this line will doubtless be extended to other lines of woollen goods from time to time.



Mercury Mills Extend

Showing the 117 foot addition recently made to the plant of Mercury Mills, Limited, at Hamilton

A Record in Construction

Addition to Espanola Mill of Spanish River Pulp & Paper Mills Made in Record Time

It is believed that in the building and equipping of a plant to house two new paper machines, the Spanish River Pulp & Paper Mills have established a record at their Espanola Mill. The actual work of construction was commenced on June 4th, when the first sod was turned. One hundred and thirty-eight days later, No. 5, the first of the new machines, was making paper. The Espanola Mill was previously a four-machine mill. The decision to make it a six-machine mill was arrived at in 1916. At that time an order was placed with the Pusey & Jones Co., Wilmington, for two machines. However, the entry of the United States in the war led to the postponement of the undertaking and the matter was left in abeyance until May of this year, when it was decided to go ahead.

The work involved was the building of a two-machine mill from the ground up and the installation of machinery and equipment in these buildings. The first action taken was the complete study and preparation of a plan under which the work was to be done. The study of all the facts, with the plans and drawings available, led to the conclusion that it was perfectly possible to complete the construction by November 1st, providing the programme adopted could be carried out and providing the machinery and equipment contractors lived up to their estimated dates.

Have Extended Main Building

Large Addition Made to Factory of Mercury Mills, Limited, to Increase Production

Mercury Mills, Limited, Hamilton, manufacturers of hosiery and underwear, have just completed the erection of a substantial addition to their Hamilton factory, which will considerably increase the production of their regular lines. The main factory building, as erected in 1916-17, had a frontage of 371 feet, and consisted of two parts, the mill proper, 176 x 92 feet, and the dye house 176 x 51 feet. The extension now completed has been made to the mill and consists of a structure 117 x 92 feet, three storeys and basement. The company will take on quite a number of additional hands in order to make up a complete staff.

Increase Output 50 per Cent.

A New and Much Larger Plant Being Erected in Ottawa by Bishopric Wall Board Co., Limited

Replacing their plant destroyed by fire last August, the Bishopric Wall Board Co., Limited, Ottawa, are erecting and equipping buildings to give 50 per cent. more output and greatly improve working conditions. The old plant was largely of frame construction; the new plant is being built of brick, cement blocks and Bishopric stucco board. It includes main factory with boiler house, 105 x 60 feet, with 16-foot walls; dry kiln, 50 x 50 feet, with 9-foot walls, divided into three chambers, each chamber holding approximately

100,000 pieces of laths on truck; and planing mill, 48 x 50 feet, with 12-foot walls. They will also have a store shed, 50 x 90 feet, of frame construction, for storing manufactured board and roofing, and an open shed, 120 x 120 feet, for storing kiln-dried lath. Although capacity will be greater, they do not anticipate employing more labor, because laths will now be carried to the factory by carrying chains instead of trucks as before.

Furnace Fire Brick Industry

Gates Refractories, Limited, of Montreal, Acquire and Operate Plant Seven Miles from City

The plant formerly occupied by the Art Furniture Co., and located about seven miles from the centre of Montreal, has recently been taken over by Gates Refractories, Limited, who are now manufacturing furnace fire brick at the rate of about 300 tons per months. Hitherto, J. W. Gates, patentee of the bricks now being made, obtained his supply from other fire brick firms, but the demand increased so much that a sufficient supply could not be obtained from these sources. Accordingly the original company was reorganized and the present industry established. The buildings acquired are of two-storey brick construction with about 12,000 feet of floor space. Two kilns of 50 and 60 tons capacity respectively are in operation, and two other 60-ton kilns will be completed by the end of the year. The company will specialize in power plant brick work.

Increasing Newsprint Output

The Laurentide Company Will Add Two Immense Paper Machines to Their Equipment

Through the addition of two 166-inch newsprint machines, the Laurentide Company of Grand-Mere, Que., will increase the capacity of their paper mills to 360 tons per day. In announcing the decision of the management to make this increase in equipment, the *Digester*, the company's house organ, says:—

The new machines are to be placed in a new building to the west of the present Number 3 machine room. This building will be 320 feet long by 90 feet wide and two storeys in height. It will be of non-combustible construction throughout and its architectural design will be similar to the present machine rooms, except that it will have a flat concrete roof on steel trusses. The interior of this new machine room will be one of the "show" places of the plant. The walls will have enamelled tile wainscoting and the floors are to be of special composition similar to those in the power house.

"Both of the new machines are to be designed to run up to one thousand feet of paper per minute. They will not start off at this pace when they are first run, however. They will be started at about 650 feet per minute, and as they become "tuned up" their speed will be increased until they reach the maximum of one thousand feet every minute that they run. The length of the wire will be about 112 feet, and it will be pitched about four feet. There will be four presses and forty dryers, each six feet in diameter. The details of the driving arrangement have not yet been fully worked out, but it is expected that a very great improvement will be made over anything that has been installed up to date. The machines will also have a number of new features, details of which are not yet available. Over each of the machines will be an electric travelling crane of about twenty-five tons capacity.

"In addition to the extension to the Paper Mill, other new equipment is to go into the Laurentide Plant in the near future. Three new grinder units are to be placed in an extension to the present grinder-room. Outside of these, the new machines will require additional machinery in the groundwood screen room, and new equipment in the boiler-house, where an additional battery of boilers will be installed. No changes will be necessary in the sulphite mill, as it already has much more than sufficient capacity to supply the additional requirements of sulphite pulp. The present sulphite slush system will be extended to take care of the new machines.

More Production by Abitibi Co.

Big Newsprint Paper Mill at Iroquois Falls Will Have Additional Capacity Next Year

The foundation of a large extension to the mills of the Abitibi Power & Paper Co., Limited, at Iroquois Falls, Ont., is now in and construction of the new building will be proceeded with next spring. It is being erected to house three new machines, which will add very considerably to the capacity of the mills. Two of the new machines are for the manufacture of newsprint paper, being 232 inches wide, with a capacity of 85 tons each. The third is a board machine, 132 inches wide, with capacity of 60 tons. The company hope to have one of the newsprint machines and the board machine in operation in the fall of 1920 and the other newsprint machine in operation a year later. In the meantime the mills are running to capacity.

Building Foundry

Auto Specialties Manufacturing Co. of Canada Will Erect Malleable Iron Foundry

One of the notable developments of the day at Windsor is the announcement that the Auto Specialties Manufacturing Co. of Canada have purchased a site of 10½ acres on which they will erect a modern malleable iron foundry and other buildings later on. The company are already located in



Crabtree Division, Howard Smith Paper Mills, Limited

Which will be further extended to provide additional capacity for the manufacture of sulphite bonds



A Recent Plant Extension in Hamilton

An Addition, 208 feet long by 75 feet wide for warehousing purposes, now under erection by the Canadian Steel and Wire Co., Limited

Windsor where they manufacture Bair Bow separating top holders, automobile jacks and malleable iron motor car parts, and their purpose in erecting a foundry is to supply themselves with malleable iron. The first unit of the foundry will cover approximately 45,000 square feet and will cost about $200,000. Its erection will be followed by that of a machine shop, 200 x 80 feet. The buildings will be the latest word in building construction, ample thought having been given to light, ventilation, etc., and they will be absolutely fire proof. The company expect to have the plant ready for operation by April and will employ about 200 hands. Apart from their own requirements, they will be able to take on some custom work.

Cotton Mill Enlargements

Canadian Cottons, Limited, Have Been Carrying Out Large Programme at Hamilton

By raising the roof on their No. 4 and No. 5 buildings at Hamilton and adding a third storey, Canadian Cottons, Limited, have secured approximately 24,000 square feet additional floor space. This has enabled them to instal more carding and spinning machinery, sufficient to increase their spinning product by about 25 per cent. They have also added another storey to their old engine room building, giving 2,000 square feet more space which will be used for employees' dining room and first aid room. At present they are adding two storeys to their cotton warehouse, which will increase cotton storage capacity by 11,500 square feet. They expect to have all enlargements completed and in operation by the first of the year.

New Pulp and Paper Co.

Great Lakes Paper Co. Will Proceed With Their Proposed Industry at Port Arthur

Wiring from Chicago on November 7 to D. M. Hogarth, M.P.P., Port Arthur, Lewis L. Alsted, president of the Combined Locks Paper Co., of Combined Locks, Wisconsin, stated that it was the intention of the Great Lakes Paper Co., to proceed at once with their proposed pulp and paper industry at Port Arthur. The plant will be located on the Carrick property, consisting of 100 acres and lying north-east of Port Arthur. It will consist of ground wood, sulphite and paper mills of 30,000; 7,500 and from 33,000 to 35,000 tons per annum capacity, respectively. The power will be supplied from the Nipigon development of the Ontario Hydro-Electric Power Commission, for which a contract has already been signed. The first unit will be in operation by December, 1920, and the paper mill by June, 1921. The cost of construction will be from $5,000,000 to $6,000,000. Interested in the company, in addition to Mr. Alsted, are George Seaman, president of the Seaman Paper Co., Chicago, and James Whalen, president of the Port Arthur Shipbuilding Co., and a director of the Whalen Pulp & Paper Co.

Three Hundred Motors a Week

New Company Secure Plant at Stratford for Manufacture of Phonograph Motors

With a ready market at their door in the McLagan phonograph industry, Canadian Phono Motors, Limited, which has recently been organized at Stratford, will commence the manufacture of phonograph motors shortly after the first of the year. The company have secured an existing building, 40 x 80 feet, three storeys and basement, and are putting it in shape for their purpose. They expect to produce 300 motors a week at first and hope to give employment to about fifty hands. While not financially connected with the Phono-Motor Mfg. Co., of Brooklyn, N.Y., the Canadian company will manufacture from the same patents. The manager is Mr. E. H. Wilkinson, whose father is Mr. E. E. Wilkinson, manager of the Phono-Motor Co.

Knitting Factory for Owen Sound

Clinton Knitting Co. of Clinton, Ont., Establish Branch Industry and Start Operations

Operations started on November 10th at the branch plant located by the Clinton Knitting Co. of Clinton, Ont., at Owen Sound. The company have leased about 4,000 square feet of floor space in a building on 9th Street East, occupied by the Owen Sound Garage, Limited, and are starting in a small way, though they plan eventually to employ from 50 to 100 girls. In fact the size of the plant will only be limited by the amount of help they can secure. Knitting only will be done at first, and goods will be forwarded to Clinton where they will be dyed and finished. Later a dyeing plant will be installed. The company manufacture hosiery only. The industry was started in Clinton 14 years ago and now employs 63 hands, with a branch employing 35 hands at Wingham. The



Extending the Big Plant of the Goodyear Tire and Rubber Co. of Canada

This photograph shows progress on new wing, 120 x 160 feet, at east end, and the start of construction on west wing of similar size. These additions will increase the plant's capacity from 2,500 to 3,500 tires per day

largest shareholders are the Owen family, formerly of Clinton, but now of New York. Charles F. Libby is secretary and general manager, and his son, Frank J. Libby, will take charge of the Owen Sound plant.

May Enlarge Soon

Canadian Plant of the Shredded Wheat Company Will Soon Require Enlargement

Referring to the report that the Shredded Wheat Company, Niagara Falls, contemplated making additions to their plants on both sides of the Niagara River, Mr. R. W. Ogden, Secretary, states that: "We do not propose at present to make any alterations or additions to our plant on the Canadian side, although, with the present growth of our business, some enlargement or change in that plant will have to be taken care of in the near future. At the present time our plans consist of a duplication of our present plant located on Erie Avenue, Niagara Falls, N.Y., together with the addition of several units to our wheat storage elevator.

New Milling Company

Judge, Jones Milling Co., Limited, Have Established Milling Industry at Belleville

There has just been completed at Belleville a mill with capacity of 250 barrels of flour, 250 barrels of corn flour, 100 barrels of rolled oats, 300 barrels of corn meal, and 1,000 sacks of feed per day, in addition to an elevator to handle oats and grain for cleaning and bagging in transit. The industry belongs to the Judge, Jones Milling Co., Limited, a new company affiliated with the Judge Grain Co., of Montreal, and in which Grahams Limited, of Belleville, hold a half interest. Mr. George B. Jones, a miller of several years' experience, is manager, and the plant was to have been ready for operation about December 1.

Another Branch Plant

Eclipse Machine Co. of Elmira, N.Y., are Locating an Industry in Walkerville

The Eclipse Machine Co. of Elmira, N.Y., manufacturers of brakes, clutches, etc., have recently purchased the empty factory of the Cott-a-lap Co. of Walkerville, Ont., and will probably begin operations before the end of the year, employing about one hundred hands at the outset. The plant



Corner View of New Wing

Taken from the south-east corner of the Goodyear building, and showing the main building in the background to the left

consists of two good large buildings, one of two storeys and the other one storey. The Cott-a-lap Company manufactured jute for paneling the walls of rooms, but owing to the war and the consequent shortage of material, they suspended operations and have now disposed of their plant. The price paid is stated to be $40,000.

New Whitewear Industry

Sound Whitewear, Limited, Started Operations During November in Owen Sound

Reference was made in the November issue to the establishment in Owen Sound of a new whitewear industry by Messrs. McKnight and Kelley. It is now possible to state that the company will operate under the name of Sound Whitewear, Limited, with R. C. McKnight, President; J. J. Kelley, Secretary-Treasurer; and R. G. McKay, Elias Lemon and John Parker, Directors. The company have leased Lemon's Hall, which has 7,500 square feet of floor space, and will manufacture ladies' and children's whitewear, giving employment to 25 girls at the outset. The company's product will be disposed of through the jobber and retailer.

Turn to Page 95 for Additional Industrial Expansion Information

Freight Claims and Their Collection

This is the First of a Series of Articles Setting Forth the Proper Methods of Preparing and Presenting Freight Claims to the Carriers to Ensure Prompt Settlement—The Problem is One of Special Interest to Every Shipper and Receiver of Freight, Especially Those Without the Aid of a Traffic Manager

By F. R. ALLWARD

Transportation Department, Canadian Manufacturers Association

"HOW to collect freight claims?"—that is the problem confronting every shipper and receiver of freight, where the volume of business does not warrant the services of a competent traffic manager. There is probably no point of contact between the railways and their clients that causes more friction, and it is perhaps equally true to say that there should be none easier of adjustment.

Railway managers now realize that the manner in which claims are handled has a direct and important bearing on the attitude of the shipping public toward the carrier and thus very directly on the success or failure of the struggle of the various lines and systems to retain old and acquire new business.

The broad principles of this new policy are being gradually instilled into the minds of railway claims agents, as well as of all employees whose duties require them to negotiate with claimants. However, the carrier must comply with the law, as embodied in the Canada Railway Act, and it is ignorance of this law (or failure to observe it) on the part of many shippers that is responsible for nine-tenths of the trouble.

Claims Accepted in Good Faith

In the ordinary channels of trade, such as the sale and distribution of manufactured goods, a high standard of ethics has grown up in recent years, as a result of which a claim made by a customer for goods not up to standard, damaged, or short received, is almost invariably accepted in good faith. In fact, many of the most progressive houses have adopted the motto: "The customer is always right," and every claim is adjusted on that basis.

It is perhaps natural, therefore, for the small shipper not fully conversant with the law of carriers, to file a claim in a more or less informal manner and to expect the railway company to arrange a prompt adjustment in accordance with the usual trade custom.

Right there is the crux of the trouble—the cause of most of the friction between the railways and their clients.

A railway company, in undertaking for hire to carry goods for the general public, subjects itself to the law of carriers under Common Law, as well as the Canadian Railway Act. Sections 427, 428 and 429 of the Act have a direct bearing on the settlement of freight claims and govern largely the policies and methods of investigation followed by the Claims Department of a railway. Section 427 expressly provides that:

"Any officer or agent of any railway company who knowingly or wilfully permits any person or persons to obtain transportation for property at less than the legal rate established, by means of false billing, false classification, false report of weight, *or by any other device or means*, shall for each offence be liable to a penalty not exceeding $1,000 and not less than $100.00."

It is also provided in Section 428 that:

"Any person or persons who shall knowingly or wilfully, with or without the connivance of the carrier, obtain transportation for goods at less than the published rates by false billing, false classification, false representation of the contents of the package, *or by any other device or means*, shall for each offence be liable to a penalty not exceeding $1,000 and not less than $100.00."

A claims agent of a carrier, who fails to properly investigate or verify a claim, is deemed guilty on the charge of having permitted the claimant to obtain transportation of his property at less than the legal rate. The consignor or consignee who files a fictitious claim is also deemed guilty of having violated the law and is subject to a fine or imprisonment.

It will be readily perceived therefore that a claims agent must of necessity thoroughly investigate and verify a claim by documentary proof, before authorizing payment, and in doing so he is protecting the interests of the claimant as well as of the carrier. A shipper's word may be as good as his bond, in the ordinary channels of trade, but if he expects a railway company to give his claims favorable consideration he must follow the rules of evidence as practised in the courts of law. In other words: he must furnish the carrier with the documents and proof usually required in support of a claim and keep his records of the entire transaction in such shape that they are readily accessible as evidence.

The claims department of a railway is an informal court, and the official in charge a judge; and, if the facts submitted in support of a claim are not conclusive evidence of his company's liability, he is justified in refusing to authorize payment.

Easily Adjusted if Properly Submitted

It has been stated above that of the various questions arising between the shipper and the carrier, none should be easier of adjustment than a claim by the shipper against the carrier for loss, damage or overcharge in freight, for the reason that when the carrier accepts a shipment for transportation, it thereby undertakes to transport that shipment from the point of origin to the point of destination, within a reasonable time, and to deliver it in good condition (or at least in the same condition as received). This is done under a clear and explicit contract, which, taken with the duties and obligations placed upon it by law, governs and controls where there is a breach by either party. Consequently, should the goods suffer damage or be lost in transit, or if the contract is broken in any other way, it simply rests with the shipper or the consignee to present a claim to the carrier, and if properly verified the latter has no recourse but to honor the same.

Legal questions will, of course, arise in determining whether or not there has been a breach of contract for which the carrier is liable to the shipper; but it may safely be stated that in the majority of claims the carrier's liability is so very apparent that the carrier does not attempt to waive responsibility.

A claim may be presented to the local freight agent of the carrier, who is responsible for the breach of contract. but many experienced shippers prefer to negotiate direct with the claims agent. However, either method of serving claim

is in order, provided same is supported by the proper documents and a full statement of the facts relating thereto.

The following list contains a brief description of the documents required:

LOSS AND DAMAGE.

(1) Statement of claim containing description of shipment; name and address of shipper; consignee; point of origin; destination; number and description of articles; nature and extent of loss or damage; invoice price of articles; amount of claim, etc.

(2) Original bill of lading—if not previously surrendered to carrier.

(3) Original paid freight (expense) bill.

(4) Original invoice, or certified copy.

(5) Other particulars obtainable, in proof of loss or damage claimed.

CLAIMS FOR OVERCHARGE.

(1) Statement of claim, showing charges and rate assessed; rate claimed, and tariff authority.

(2) Original paid freight bill.

(3) Original bill of lading—if not previously surrendered to carrier.

Additional Articles to Follow

In the succeeding articles which will be published each month in INDUSTRIAL CANADA, an attempt will be made to set out the steps that should be followed by a shipper or consignee in keeping a record of each transaction where there is a breach of contract by the carrier, in order that proof may be readily available.

Service to Australasia

S.S. Orari to Sail from West St. John on December 15 for Auckland, etc.

The New Zealand Shipping Company will have the steamer *Orari* on the berth at West St. John to sail about December 15th for Auckland, Wellington, Lyttleton, Timaru, Melbourne and Sydney. All requests as to space and rates should be addressed to the New Zealand Shipping Company, Limited, 213 Board of Trade Building, Montreal.

Handling Perishable Traffic

How Shippers by Express May Help in Effort to Conserve Food Supply

A bulletin has been issued to the shipping public by the Express Traffic Association of Canada, dealing with the handling of perishable traffic by express during cold weather. Its contents, which are as follows, are brought to the special attention of manufacturers:

"In view of the susceptibility to damage by frost during certain months of the year—approximately from the 1st of November to the 31st of March—the express companies desire to direct attention to the necessity of better protective packing for such articles as green or fresh fruits and vegetables, flowers, liquids, etc. The Government is, quite properly, putting forth extraordinary efforts to conserve the food supply. It is also your duty and ours to prevent destruction.

"Express goods are carried on passenger trains, which are heated by steam or otherwise. Shippers may be under the impression, therefore, that perishable articles forwarded by express are always quite safe from frost, but it must be remembered that these goods are hauled by wagons in the cities, and are of necessity moved on station platform trucks between trains and depots, where heated protection cannot always be provided.

"The express companies are not liable for any loss or damage to shipments caused by weather conditions which are beyond their control.

"In the mutual interests of shippers and express companies, and of the public welfare, you are respectfully asked to assist in the matter of better protective packing, and also to refrain from tendering to the express companies for shipment perishable articles which are not sufficiently packed to protect the contents from damage by frost. The express companies prefer that their patrons should take suitable steps in this matter, thus avoiding the necessity of their declining to accept and receipt for shipments not properly protected."

Marking Express Shipments

Pamphlet Issued by Express Traffic Association for Education of Shippers by Express

A pamphlet was issued last month by the Express Traffic Association of Canada, containing the classification requirements and suggestions to the public relative to the proper marking of express matter. As the subject is one of much importance in expediting the handling of the express these marking requirements are reproduced herewith:—

(*a*) Each package, bundle or loose piece in a shipment must be plainly, legibly and durably marked, showing the name of only one consignee, and of only one station, town or city and province to which destined. Old marks must be removed or effaced by the shipper.

(*b*) Shipments wrapped in paper, or packed in boxes, crates, barrels, corrugated strawboard, pulpboard or fibreboard containers must be marked with pen, brush, stencil, waterproof crayon, or by label securely attached with glue or equally good adhesive. Such shipments must not be accepted when marked only with tag, except as provided below:

Shipments of iced goods, such as fish, oysters, etc., must be marked with brush, stencil or waterproof crayon, or with two tags securely tacked, one of which must be sunk in a groove in the box or case, or otherwise protected in such manner as to prevent becoming detached or defaced by contact with other articles or surfaces.

Containers which are customarily used several times for transportation of goods by express, such as bread boxes or dog kennels, which cannot be satisfactorily marked with brush, stencil, waterproof crayon or label, may be accepted when bearing two address tags securely attached to the package.

(*c*) *Castings, Machine Parts, Shafting, Pipe, Rods, Bars, and Other Metal Articles*:

1. When boxed, barreled, crated or trussed, must be marked in compliance with paragraph "(*b*)."

2. When not boxed, barreled, crated or trussed, and there is sufficient smooth surface for the purpose, the address must be plainly marked on the article with durable paint. Such shipments must not be accepted unless marks are thoroughly dry.

3. When not boxed, barreled, crated or trussed, or when not possible to mark as provided in preceding paragraph, shipments must be marked with not less than two wooden, leather, metal, cloth, rope stock or sulphite fibre-tag-board tags. Rope stock or sulphite fibre-tag-board tags may be either wholly of sulphite or rope stock or a combination of both, must test not less than 14 point, have reinforced metal eyelets, and must be attached by wire not less than 23 gauge, or strong cord. Tags must be attached wherever possible to unexposed parts of the article in order that they may not become detached in handling.

4. When tags are used for marking Rods, Shafting, Bars, Pipe, Iron Bed Sides, Automobile Springs and other articles of like character, shipped singly or in bundles without packing, there must be two tags, conforming to specifications of paragraph "3," both tags securely attached to the article by wire not less than 23 gauge, or strong cord; one tag to be concealed by being bound to the article with a burlap covering, the latter securely fastened at each end.

5. When metal articles are shipped in sacks, the address must be shown on tag conforming to the specifications in paragraph "3," attached either by wire or strong cord, and an additional tag bearing the same address must be enclosed in the sack.

(*d*) *Trunks, Suit Cases or Valises.*—Must be marked with one strong tag and have an address label pasted on the bottom in addition thereto before forwarding. Shippers should place a duplicate address inside of these articles for the purpose of identification.

(*e*) *Automobile Tires.*—When not boxed or crated, must have two marks, both to be attached to the inner surface of the package, bale or tire, and to consist (1) of a strong tag securely attached, and (2) another tag bearing the same

address, securely bound by burlap or cloth, or an address label pasted on the inner surface.

(*f*) *Bedding, Carpets and Rugs.*—When not boxed or crated, must be sewed up in burlap or some other substantial cloth covering, and marked with stencil or brush; such shipments must not be accepted when marked only with tag. Shippers should place duplicate address inside of the bale for the purpose of identification.

(*g*) *Nursery Stock and Trees* in bundles or bales must be marked with not less than two tags, securely attached, and when in bales, shippers should place a duplicate address tag inside the bale for the purpose of identification.

(*h*) *Household Goods and Furniture* which, under individual items may be accepted when not boxed or crated, must be marked by not less than two tags securely attached to each piece.

(*i*) *Lot Shipments.*—Except when in carloads, each package or article in a lot shipment must be marked in compliance with these requirements.

(*j*) *Shipments not marked in accordance with the foregoing requirements, or as noted under individual items of the Classification, must be refused.*

Steamship Services

Steamship Companies Are Now Transferring Their Sailings to St. John and Halifax

Navigation from the port of Montreal closes about November 26th. Commencing about December 1st, the Canadian Government Merchant Marine, Canadian Pacific Ocean Services, Furness Lines, Manchester Liners, Canadian-Transatlantique Line, Head Line, Marine Navigation Limited, Houston Line, Elder Dempster Line, and New Zealand S.S. Company, will begin the winter season from West St. John, St. John and Halifax.

The C.P.O.S., in their sailing list No. 1, for the winter season, dated November 21st, 1919, show the following sailings from West St. John, St. John and Halifax:—

West St. John to Liverpool.

Mategama	C.P.O.S. Lines	Ab't Dec.	4
*Canadian Rancher	Can. Govt. Mer. Marine, Ltd.	Ab't Dec.	6
*Canadian Ranger	Can. Govt. Mer. Marine, Ltd.	Ab't Dec.	10
Corsican	C.P.O.S. Lines	Ab't Dec	13
Empress of France	C.P.O.S. Lines	Ab't Dec.	19

* Sails from St. John.

West St. John to London.

Grampian	C.P.O.S. Furness Lines (C.P.O.S.)	Ab't Dec.	7
Montcalm	C.P.O.S. Furness Lines (C.P.O.S.)	Ab't Dec.	9
Mattawa	C.P.O.S. Furness Lines (C.P.O.S.)	Ab't Dec.	10
Cornish Point	C.P.O.S. Furness Lines (Furness)	Ab't Dec.	20

West St. John to Antwerp.

Messina	C.P.O.S. Furness Lines (Furness)	Ab't Dec.	5
Castellano	C.P.O.S. Furness Lines (Furness)	Ab't Dec.	20
War Beryl	C.P.O.S. Furness Lines (C.P.O.S.)	Ab't Dec.	26
Tunisian	C.P.O.S. Furness Lines (C.P.O.S.)	Ab't Dec.	28
Holbrook	C.P.O.S. Furness Lines (C.P.O.S.)	Ab't Dec.	29

West St. John to Glasgow.

Pretorian	C.P.O.S. Lines	Ab't Dec.	10
Sicilian	C.P.O.S. Lines	Ab't Dec.	18

West St. John to Avonmouth Dock (Bristol).

Sardinian	C.P.O.S. Lines	Ab't Dec.	26

West St. John to Manchester.

Manchester Hero	Manchester Liners	Ab't Dec.	14

West St. John to Havre (France).

Bilbster	Can. Trans. Atlantic Line	Ab't Dec.	6
Hudson	Can. Trans. Atlantic Line	Ab't Dec.	13

West St. John to Belfast.

Ramore Head	Head Line	Ab't Dec.	15

West St. John to Dublin.

Fanad Head	Head Line	Ab't Dec.	12

West St. John to St. Nazaire (France).

Cape Corso	Marine Navigation Ltd.	Ab't Dec.	15

West St. John to Buenos Ayres and Montevideo.

Hyanthes	Houston Line	Ab't Dec.	15

West St. John to South African Ports—Cape Town, Port Elizabeth, East London, Durban, Delegoa Bay.

A Steamer	Elder-Dempster Line	Ab't Dec.	20

West St. John to Australasian Ports—Melbourne, Sydney, Auckland, Wellington, Timaru.

Orari	New Zealand S.S. Company	Ab't Dec.	15

St. John to Barbados, Trinidad, Demerara and B.W.I.

Chaudiere	Royal Mail Steam Packet Co.	Ab't Dec.	9

St. John to Kingston, Jamaica, and Havana, Cuba.

Canadian Warrior	Can. Govt. Mer. Marine, Ltd.	Ab't Dec.	30

Halifax to Liverpool.

Canadian Seigneur	Can. Govt. Mer. Marine, Ltd.	Ab't Dec.	15

Halifax to Glasgow.

Canadian Trapper	Can. Govt. Mer. Marine, Ltd.	Ab't Dec.	5

Halifax to Rio Janeiro, Santos (Brazil), Buenos Ayres (Argentine).

Canadian Spinner	Can. Govt. Mer. Marine, Ltd.	Ab't Dec.	20

Halifax to Havana, Cuba.

Canadian Trader	Can. Govt. Mer. Marine, Ltd.	Ab't Dec.	3

Halifax to Barbados, Trinidad and Demerara.

Caraquet	Royal Mail Steam Packet Co.	Dec.	1
Canadian Signaller	Can. Govt. Mer. Marine, Ltd.	Ab't Dec.	27

Halifax to Santiago (Cuba) and Kingston (Jamaica).

Amanda	Pickford & Black	Ab't Dec.	25

The Cunard Line and the White Star-Dominion Line will transfer their sailings to the port of Portland, the sailings published by the G. T. R. from Portland being as follows:—

Portland to Liverpool.

Dominion	White Star-Dominion Line	Ab't Dec.	2
Megantic	White Star-Dominion Line	Ab't Dec.	6

Portland to London.

Chipana	Cunard Line	Ab't Dec.	14
Willaston	Cunard Line	Ab't Dec.	18

Portland to Glasgow.

Saturnia	Anchor-Donaldson Line	Ab't Dec.	9
Cassandra	Anchor-Donaldson Line	Ab't Dec.	17

Portland to Avonmouth.

Turcoman	Dominion Line	Ab't Dec.	11
Welshman	Dominion Line	Ab't Dec.	20
		1920	
Cornishman	Dominion Line	Ab't Jan.	2

Portland to Hull. 1919

Maplemore	Furness Line	Ab't Dec.	10
Grampian Range	Furness Line	Ab't Dec.	20

Portland to Leith.

Cairndhu	Thomson Line	Ab't Dec.	7

An Experimental Brick Plant

Enterprise of Nova Scotia Steel & Coal Co., Limited, in Making Their Own Fire Brick

An interesting description of the brick plant now being operated by the Nova Scotia Steel & Coal Co., Limited, at Sydney Mines is given in the November issue of *Iron and Steel of Canada*. Prior to 1916 all the refractories for the company's blast furnaces and steel mills at Sydney Mines were obtained from the United States, but, even when times were normal, deliveries were uncertain. This was aggravated by the war and the company were faced with a serious problem. In order to improve conditions it was decided to build a brick plant. This was done in 1916 and, as originally designed, the machinery building was 30 x 60 feet. The dry shed was soon found to be too small and an extension was built bringing the size up to 80 x 72 feet. A second kiln was also built, bringing the capacity of the plant up to about 5,000 bricks per day. The completed installation cost $27,000. Concluding his description, the writer, Mr. A. Dawes, superintendent of power, says:

"To sum up, this plant, which was started on an experimental basis, has proved itself a success and demonstrated that good refractories can be made from material obtained from the Nova Scotia Company's own collieries and from other sources in the province. The cost of bricks made in this plant was generally lower than those obtained elsewhere, but the factor which appeals most strongly to those in charge of operations at the steel plant at Sydney Mines is that they have on hand a brick-making plant which is a standby against any delays in delivery or hold-ups due to any cause of the firebrick necessary for their extensive steel industry."

Canadian Exporters' Exhibition in London, Eng.

Endorsed by

Canadian Mission in London
The Department of Trade and Commerce, Ottawa
Canadian Trade Commission, Ottawa
The Canadian Manufacturers Association

The first entirely Canadian Industrial Exhibition, to be held outside of our Dominon, is scheduled to take place in the Royal Agricultural Hall, London, England, from June 3rd to June 17th, 1920, inclusive. Held under the auspices mentioned above, this exhibition will undoubtedly be of the greatest possible value to the Canadian Manufacturers.

London is the mart of the world. It is the giant clearing-house for world trade, wherein importers buy, not only for British account, but to a very large extent for foreign buyers as well. Representatives from these importing houses, and from others throughout the United Kingdom, will visit the Canadian Industries Exhibition by special invitation.

Personal salesmanship and actual demonstration are universally acknowledged to be the fundamental elements in selling goods. If your Company is already represented overseas, the British buyers will look for your booth at the Exhibition. If your Company is seeking such representation, the Exhibit offers you the easiest, quickest, and most economical way to attain your object.

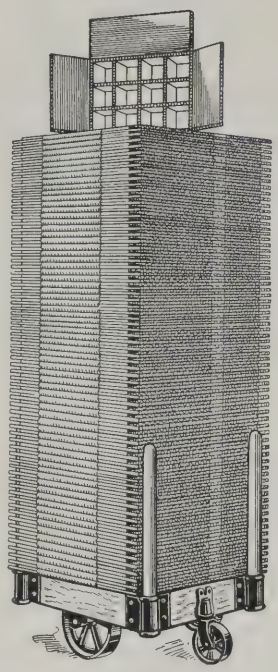
CANADIAN INDUSTRIES EXHIBITION

AGRICULTURAL HALL

LONDON, ENG.

June 3rd to 17th, 1920

For full particulars apply to O. C. PEASE, 41 Victoria St., Toronto



OUR SPECIALTY
FOLDING CELLBOARD
FREIGHT BOXES

Cellboard is the proper name for what is commonly called corrugated board

Established 1909

ADAMS CELLBOARD COMPANY

MANUFACTURERS OF FIRST QUALITY
SHIPPING CONTAINERS AND CORRUGATED PAPER

IMPORTERS OF
GUM SODA AND SEALING TAPES

Our board is the thickest on the market. Our capacity is a carload per day

We desire to have your samples or measurements to quote on when you are considering placing an order

5 TO 21 DEFRIES STREET
AND DON ESPLANADE
TORONTO

For Sale—Factory Sites

LACHINE CANAL
MONTREAL, QUEBEC

WE HAVE received instructions to sell the property belonging to CANAL LANDS LIMITED situated on the South side of the Lachine Canal, practically within the CITY LIMITS. The property is the first one outside the LIMITS.

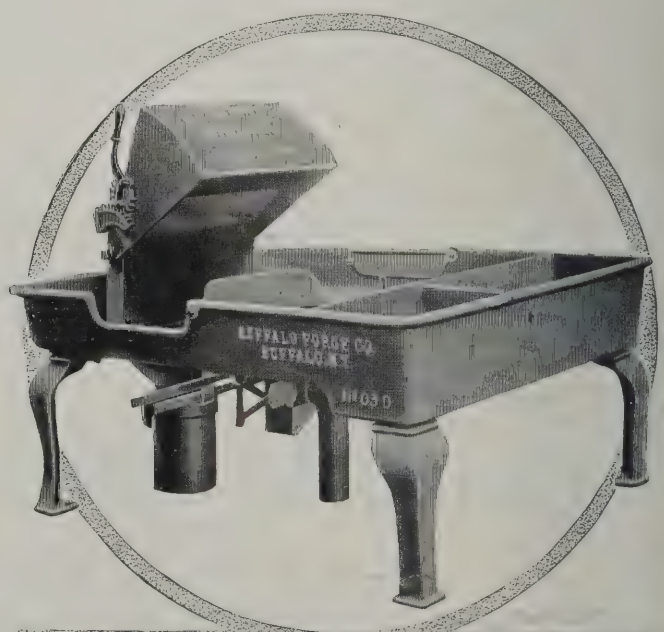
Owing to its close proximity to THE TOWN OF COTE ST. PAUL, which now forms part of the CITY OF MONTREAL, LABOR CONDITIONS ARE EXCEPTIONALLY GOOD.

The very best shipping facilities both by rail and by water.

It has a frontage on the LACHINE CANAL of 959 feet, and an average depth of about 2,488 feet, and a superficial area of 2,500,375 square feet. Would sell en bloc or in smaller parcels to suit purchasers.

For further particulars apply to

REAL ESTATE DEPARTMENT,
MONTREAL TRUST COMPANY,
11 Place D'Armes, Montreal, Que.



HEAVY DUTY FORGES

Canadian Forges are designed for the particular work they are required to do

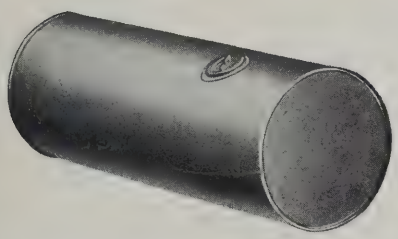
Our Catalogs 100 and 108-14 describe our full line. Write for a copy.

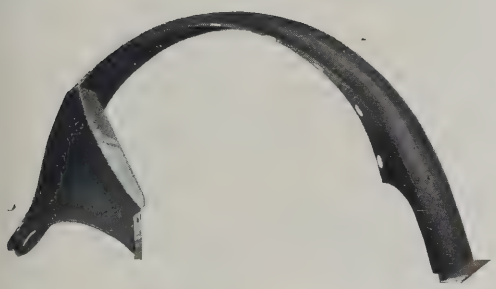
CANADIAN BLOWER & FORGE CO., LTD.
KITCHENER, ONT.



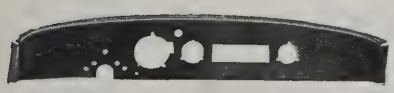


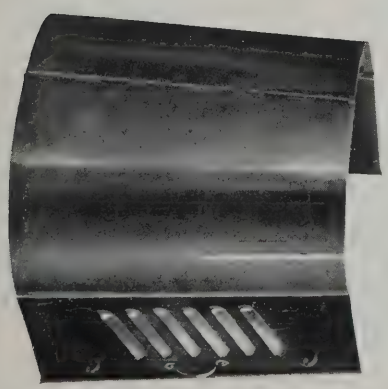


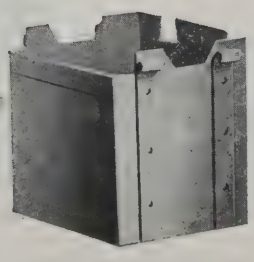


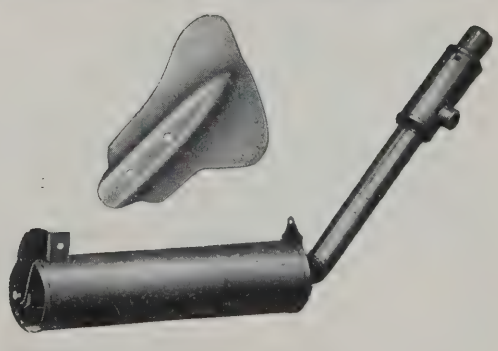












—and here's the proof—

of our exceptional skill in the production of all kinds of

STEEL STAMPINGS

OUR regular business for many years has been based on metal stamping. Consequently, we have developed a metal stamping department with batteries of heavy presses, hammers and other up-to-date equipment that make for the very highest efficiency.

We are doing a vast amount of automobile body stampings—work that is of the most difficult character. Our success in this line clearly indicates our ability to serve you.

If you are in the market for steel stampings of any size write us for quotations. Our prices, the quality of our work, and the reliability of our service will give you complete satisfaction.

THE PEDLAR PEOPLE, LIMITED

Established 1861

Executive Office and Factories: Oshawa, Ont.

Branches: Montreal, Quebec, Ottawa, Toronto, Winnipeg, Vancouver

All Time Recorders are not Fully Automatic

and unless they are, they cannot give the complete Time Recording service you need

This description of the exclusive International Automatic features is worth every Time Recorder buyer's attention

THE demand for International Time Recorders has increased to such an extent that we feel it will be of assistance to the buyer if we make clear just what is meant by a "Fully Automatic Time Recorder."

Let us see what this means in the card type of recorder. A fully automatic time recorder is one that entirely eliminates the human element as to its operation in any shape or form. It has what is known as three specific automatic devices.

First, is the two color device or the red record, which is printed automatically by the recorder when any employee registers one minute late, or leaves one minute earlier than schedule time. The great value of this device is recognized not only for its moral effect on employees, but as well the saving of time in making up the payroll.

Second. The second automatic device is known as the automatic "Day to Day," and is a device on our recorders that shifts the position of the card holder at each midnight, so that it will register in the proper column for the subsequent day. It is a very important device, for should this be left to be done by hand, it may easily be forgotten, then the record would be printed on top of the previous day's record, which would destroy them, and it further leaves the opportunity for a malicious person to set this so it will print in the wrong column. The "Day to Day" automatic shift is purchased by a vast majority of employers of labor.

Third. The third automatic feature is known as the automatic "In and Out Shift," which is a device embodied in the mechanism of the time recorder that shifts the time card holder so that the printing mechanism will record in the IN column or the OUT column, for instance, the IN column from 7 a.m. to 9 a.m., the OUT column from 12 to 12.30 at noon, the IN column from 12.30 to 2 p.m., again the OUT column from say 4 p.m. to 6.30 p.m., adjusted of course according to requirements.

This is an extremely important device to the employer of labor, as otherwise the shifting of columns has to be done by hand by the employee as he comes in or goes out. It not only means lost time making the shift, but the employer is also depending on the human element that the records be positively correct, which one cannot be assured of except it is done by the mechanism of the recorder for reasons that must be obvious.

Without this device, any and all employees have access to the placing of the time card so that it will print in either the IN or OUT column as the employee wishes, which is not a sound proposition, for the reason that amongst a number of employees, anywhere in the world, would be found one who might be termed mischievous or even malicious, and be anxious to have time records destroyed.

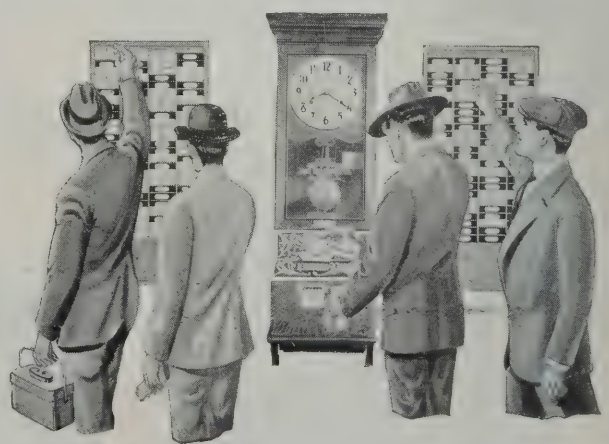
Each purchaser of a time recorder that lacks any of the three automatic features as described above has not a fully automatic time recorder of the card type; the lack of any one of these automatic features may be the cause of it costing the employer many times over what the automatic feature would have cost in the initial purchase.

We manufacture card recorders from $140 up, some of which have no automatic features whatever, and to the price of the basic machine, namely the non-automatic recorder, is added the cost of each automatic feature as desired.

INTERNATIONAL BUSINESS MACHINES CO., LIMITED

300 Campbell Ave. Toronto — Frank E. Mutton General Manager — also at Montreal, Winnipeg, Vancouver

(We also make Hollerith Electric Tabulators and Day'on Scales)



AN INTERNATIONAL FULLY AUTOMATIC CARD TIME RECORDER

The Automatic Dial Time Recorder

built by The International Business Machines Co. has exclusive Automatic features which put it in a class by itself

THE DIAL RECORDER. The dial recorder is a very much favored type of time clock, and has by far the largest percentage of sale, owing to its speed in operation, and its limit of number of employees that can use it, its cleanliness, and also the fact that no employee has access to the printed records. The fully automatic dial recorder has three distinct automatic features, which are indispensable to a complete time recording service

First, it has the automatic red color ribbon device, which will print all late records, or early leaving records in red, and which record is invaluable on account of the moral effect on the employee and the saving of time in computing the payroll.

Second. It also has an automatic feature known as the automatic column shift, which device moves the printing mechanism at the time designated so that it will print in the proper column, which is provided for each day's record of the week; for instance, when Monday's records have all been made, this device will shift the printing mechanism so it will record for Tuesday in another column, and so on.

This device is of great importance to the employer, owing to the fact that he knows he is not depending on any person or persons to see that this printing mechanism has been properly shifted, according to the set schedule.

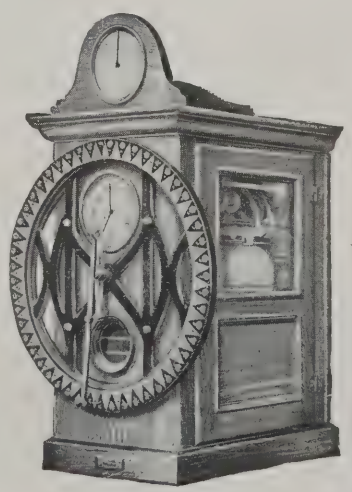
Third. The time recorder has also another automatic feature known as the "In and Out Column Shift," which device automatically shifts the printing mechanism so that the record will be printed for the IN records in their proper places, and the OUT records in their proper places, again eliminating the human element as to whether these records are properly placed or not.

Fourth. For every place of business having employees who are coming and going quite frequently, aside from the set schedule of starting and stopping work, we have what we term the "New International Dial," which is the last word in time recorders and one of the finest pieces of mechanism ever presented to the public. This machine has, as a fourth automatic feature, a device that makes it impossible for an employee to register on top of his previous record, and coupled with this device is also the fact that irrespective of automatic column features, and no matter when an employee registers, the record will be found in its right relative position. It is the only recorder in the world that will automatically place the records in their relative positions irrespective of when or how they are made.

The average number of employees operated on a time recorder to-day in manufacturing plants on this continent is 130, where a few years ago it would have averaged 175 to 200. This change has been brought about by the employer of labor recognizing the false economy of allowing too many employees to register on one recorder, as it causes congestion, it is mentally resented by the employees, and further it affects production, owing to the employees hastening away from their work so that they will be amongst the first to register out, so as to avoid that congestion.

The dial recorder is made in three sizes, for 50—for 100—for 150 employees, each employee being designated by a number on the dial of the recorder. The average size dial recorder purchased is of the 100 size, which again indicates the employer is recognizing that to have a recorder for each 100 employees is profitable indeed, and fair to the employees. We can clearly see the day coming when the average number of employees on a recorder will be 100, as it clearly tends to improve efficiency in a time recording equipment.

The Dial Recorder is manufactured in two types, namely, for a daily record and for a weekly record, and the one is selected which will fit in best with the method of bookkeeping or cost recording used by the firm installing same.



A FULLY AUTOMATIC INTERNATIONAL DIAL TIME RECORDER

Let Us Send You Our Literature And Prices

INTERNATIONAL BUSINESS MACHINES CO., LIMITED

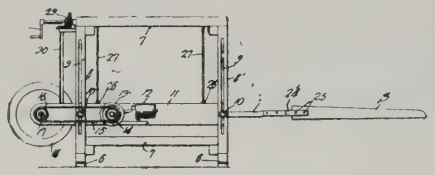
300 Campbell Ave.
Toronto

Frank E. Mutton
General Manager

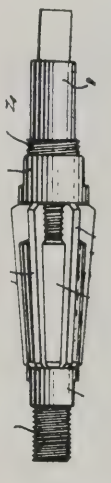
Also at
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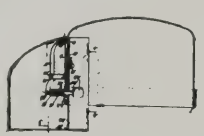
PATENTS FOR SALE



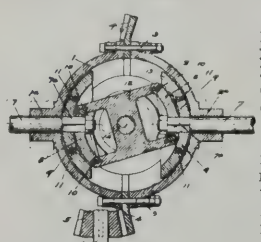
SAWING APPARATUS, a simple and easily operated mechanism, portable for convenience of felling trees or cutting logs. Is so constructed that the saw is reciprocating to make a cut and is constantly lowered so that the maximum cut at each movement is obtained. Patent for sale by Mr. A. Nelson, 246 E. Indianna Ave., Philadelphia, Pa.



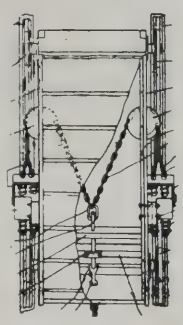
REAMER AND TAPER GAUGE, the very thing for which the mechanical world has been looking. This device is not only an adjustable, variable, taper reamer, but is also an **ACCURATE TAPER GAUGE.** This tool has been thoroughly tested and is beyond any question of experiment. The pat. holder, Mr. B. Hurd, 25 Ladd St., Portsmouth, N.H., is desirous of communicating with a reliable manufacturer with a view to negotiation for the manufacture of this invention in the Dominion.



SLOW-FEED MANGER, having a storage compartment and means operated by the animal to insure a proper feed to the bowl from the storage compartment, simple in construction, efficient in use, but strong and durable and well adapted to stand the rough usage to which articles of this kind are ordinarily subjected to. Pat. for sale by J. I. Brown, 62 Jefferson St., Westfield, Mass.



DIFFERENTIAL MECHANISM, by means of which power may be transmitted to one or more revolvable elements, driving them together in the same direction at the same speed or in opposite directions. This device is considered by experts to be one of the best that has yet been brought to their attention. It is strong, durable and absolutely efficient in use. Pat. for sale by Mr. F. W. Seeck, care Lebanon National Bank, Lebanon, Ore.



SAFETY GRIPPING MECHANISM FOR ELEVATORS, strong, durable, simple in construction, safe and convenient in use, readily set up and comparatively inexpensive to manufacture, adapted to mine cars travelling upon an inclined track and controlled by a pulling cable, and will, in case of accident, grip the rails to retard the movement of the car. Pat. for sale by C. Fak, Box 161, Bush, Ill.

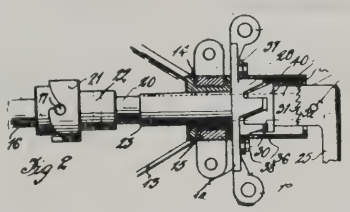
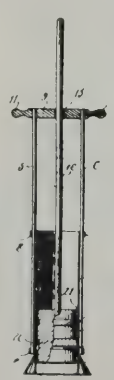


Fig 2

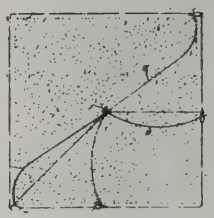
SAFETY CRANKING DEVICE FOR EXPLOSIVE ENGINES, a strong, durable and efficient cranking means, which will automatically free itself upon a retrograde movement of the engine shaft or backfiring of the engine, thus eliminating all danger. The device is simple in construction and absolutely efficient in operation. Patent for sale by J. J. Bush, 612 N. 11th St., Tacoma, Wash.



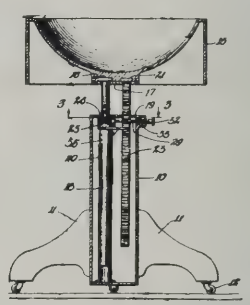
SLED, specially equipped with durable and efficient steering means and so constructed that the opposite sides may be shifted to varying positions with respect to the body, at the same time being maintained in parallelism with each other, and being securely placed. Patent for sale by S. S. Griffin, 1402 S. Durango St., Tacoma, Wash.



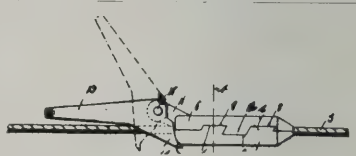
CLOTHES WASHING APPARATUS, simple and effective in use, easily operated, and may be constructed at a minimum cost. It operates both by pumping action and pounding action, thus insuring the best possible results. The inventor, Mr. W. Wilbur, Lynden, Wash., is open to negotiations in the disposal of his interests in this device.



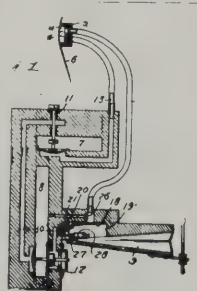
PROCESS FOR TREATING STANDING GRAIN, especially adapted for the prevention of rust on the plant after rains when conditions are such as to cause this blight. The process consists of means whereby the moisture may be shaken from the grain as illustrated above. For further particulars apply to J. Hanson, 109 N. 7th St., Montevideo, Minn., who offers patent for sale.



ADJUSTABLE STAND, convenient, simple, and attractive device, having means whereby the surface may be raised or lowered for the convenience of persons of different stature. Patent for sale by M. Tymczyna, Russel, Man.



CABLE CLAMP, a simple and convenient device, absolutely reliable, strong, durable and efficient in use, may be cheaply manufactured and placed on the market at a minimum cost with a very reasonable profit. Patent for sale by D. B. Steele, 21 E. 60th St., Seattle, Wash.



AUTOMATIC EXPRESSION CONTROL FOR PLAYER PIANO, which gives an absolutely perfect reproduction of hand playing, gets away from mechanical effect of the present devices now on the market. Patent for sale by Mr. M. S. Howard, Waukon, Ia.

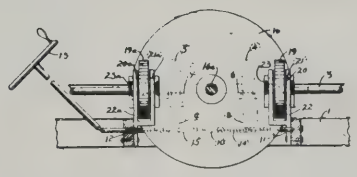


CREAM COOLER, a simple and efficient device, so constructed that it may be readily dismantled and cleaned, and that broken and damaged parts may be quickly and cheaply supplied. This device is one which should prove an attractive proposition, as it is the most practical device that has yet been given to the public. Patent for sale by T. E. Hooker, Dos Palos, Cal.

PATENTS FOR SALE

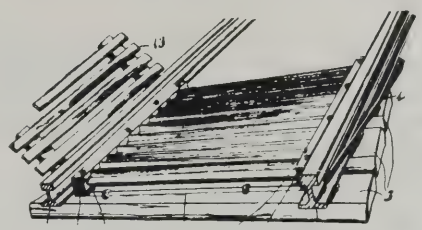


CALF WEANER, most efficient and humane device on the market. Note special features—adjustable lock nut, corrugations rendering durable, 2 in 1 spike and blab weaner, easy to remove, nose member is of hard rubber, does not in any way injure the animal, cannot get under it. Patent for sale by K. Lurz, Wall, S.D.



FRICTIONAL TRANSMISSION MECHANISM, particularly for use with tractors, quickly and easily adjusted to any desired speed for easy manipulation of tractor in any desired direction. May be manufactured and installed at a minimum cost. Patent for sale by A. J. Trigwell, 228 the Alameda, San Jose, Cal.

PATENTS
Trade Marks, Design Patents, Copyrights



CATTLE GUARD, for keeping animals from straying on a railroad or thoroughfare. This device is simple in construction, efficient in use and one which does not require any attention. The device is so constructed that should an animal try to pass it will become engaged with the device, which is sufficient to warn the animal to retire which will be allowed. Patent for sale by D. McMartin, Agardsley, Man.

Manufacturers interested in patents should have their names on our Service Dept. mailing list

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Valuable Report on Siberia

The report of the Canadian Economic Commission, Siberia, has just been issued from the Government Printing Bureau. This report covers 79 pages, including an index of subjects and geographical districts and contains a very comprehensive statement of agricultural, marketing, financial and transportation conditions. Considerable statistical information is furnished outlining the productive capacities of Siberian agricultural, fishing and timber industries, and lists of manufactured articles required in Siberia are provided. There is also a full outline of the operations of co-operative agricultural societies and their methods of financing shipments. The report is completed by a map showing the number of towns and railway connections. A copy may be had on application to the Commercial Intelligence Branch, Department of Trade and Commerce, Ottawa.

Visitor from New Zealand

A recent visitor at the offices of the Association was Mr. W. D. Munn, of Munn & Anstiss, Limited, manufacturers agents, Auckland, New Zealand, who has been arranging for new lines in both the United States and Canada. Mr. Munn states that the people of New Zealand are most favorably disposed towards Canadian goods and would gladly give them a preference, whenever possible, in making their purchases. He declares that conditions in New Zealand are good, the people being uniformly prosperous. Manufacturing is making some progress, though only in a limited number of lines and there are abundant opportunities for the sale of many kinds of manufactured products.

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Simcoe and Pearl Sts. TORONTO



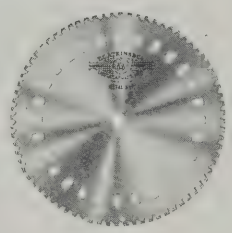
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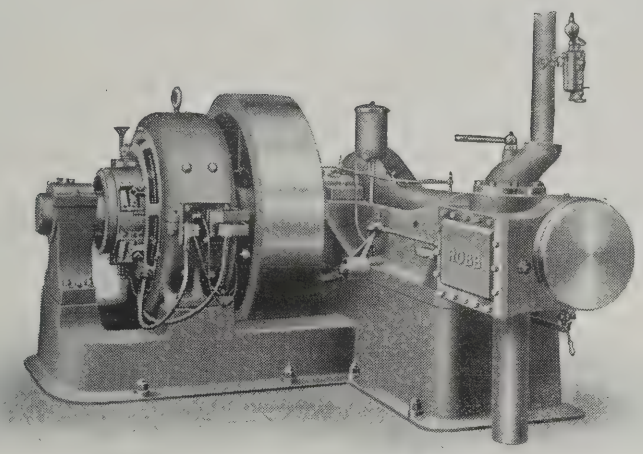
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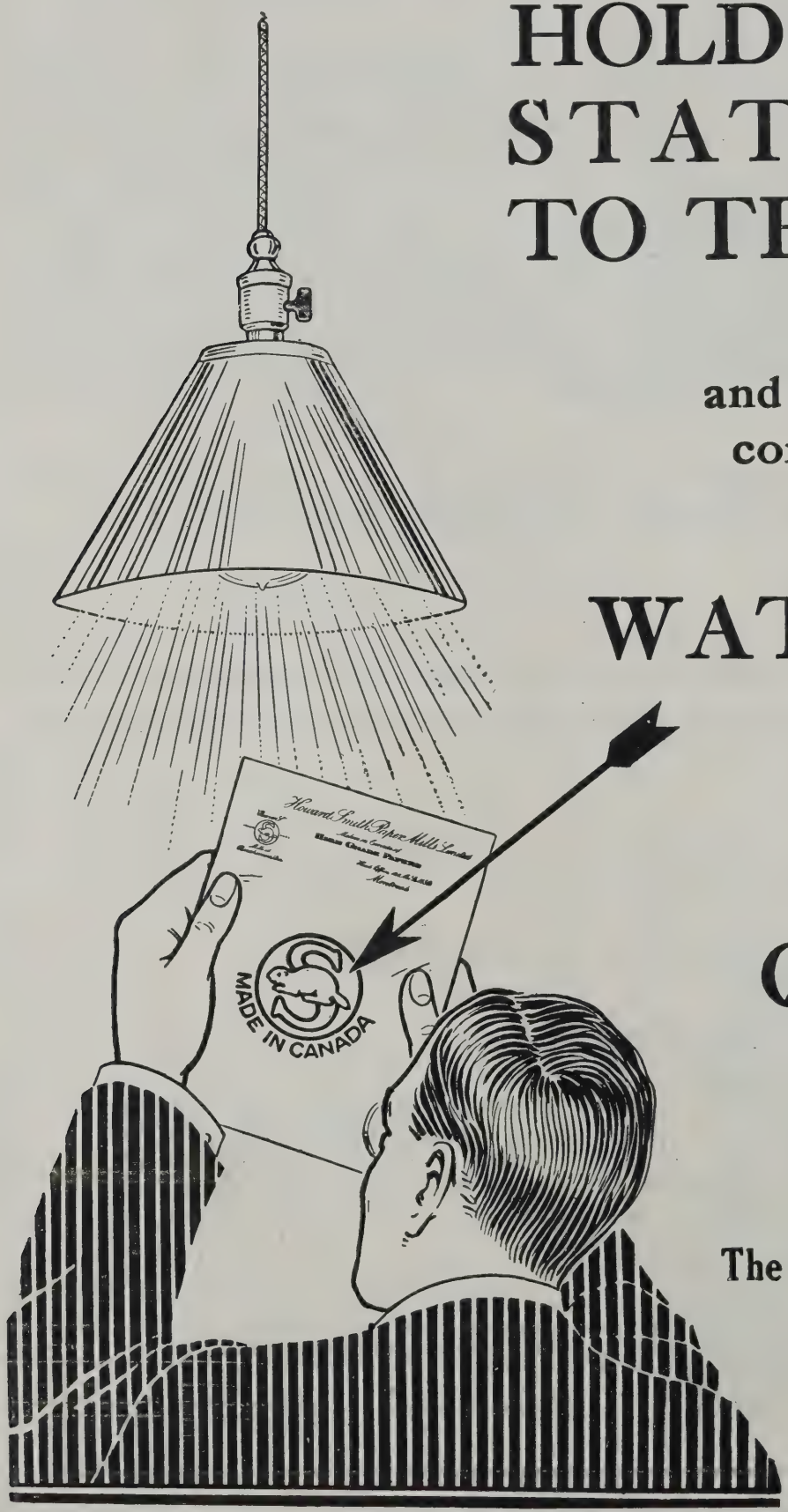
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OFFICE AND FINANCE

How to Charge Off Special Equipment

If You are Asking Yourself that Question or Have Any Doubts About it, You are Almost Sure to be Interested in This Article by the Superintendent of a Well-Known Plant

Reproduced from "Factory"

ONE of the big problems which will confront many managers in the next few years is that of the proper charge for carrying the new buildings which were erected during the war to increase the production of munitions and other Government supplies. That numbers of large eastern concerns have structures which they do not expect to utilize fully in the immediate future is quite well known.

Can the regular volume of present business and of business in prospect be expected to carry the extra burden of interest, taxes, and so on, on these vacant buildings and on their more or less complete equipment? If this burden is saddled on the price of new product, how will the product fare when it faces the competition of similar lines which are wholly free from such inflated costs? It will take a lot of courage to accept the situation as it really is and to decide it as it should be decided. The truth is that the buildings were erected, in part at least, as a speculative proposition.

How Charge Up Maintenance

Loyalty to country, patriotism, and desire to serve, all entered into the determination to build, but men with the energy necessary to accomplish such large results foresaw that perhaps they might not write off the entire cost of the buildings from the profits of the war business. They also foresaw the present situation. Now what must be done? Even if the buildings are paid for, there are maintenance charges to meet. From what fund will they be paid?

A recognized authority on the subject of factory management and operation, whose observations receive the attention of a large audience, wrote as follows a few years ago: "The product of a factory should bear only the expense used to produce it. It cannot bear the expense of idle machinery which did not contribute to its production. Although the owner may feel that he is entitled to interest on money invested even if not producing, it is coming to be recognized that idle capital is no more entitled to wages than idle labor." Doubtless the specialist would mention idle buildings or buildings partly idle were he to rewrite the paragraph to-day.

Many analogies have been drawn to illustrate this condition, but it seems that we may get a clear idea of the relation of partly or wholly unused facilities to those fully utilized by comparing them with something tangible and movable, like ships. We will assume that a man is in the ocean transportation business and that he has three vessels. When each of the three is regularly carrying full cargoes there is no question about charges.

But let us suppose that times change so that he is unable to secure business for one ship and that he takes her out of commission. What will happen if he adds her storage charges with interest and other expense to the price charged to the shippers who employ the two other vessels? Will they not patronize some other line?

Suppose that trade continues to fall off and, furthermore, that his second vessel is compelled to take harbor in a distant land, disabled, and in need of expensive repairs, and that it will take months to restore her to service. Will the owner attempt to increase the charges on his remaining vessel so that she will earn enough to cover the loss both on the ship which is out of commission and also the one which awaits repairs as a result of the storm?

Probably it would matter little what he attempted, for the shippers would soon indicate the only possible course for him. This would be to charge for the third ship just what he had always charged, with a little margin more if he could get it. But for the present the loss is on his capital account and no amount of juggling will alter the fact.

If he wants his books to show the real condition, his surplus will show the loss or his capital account will be reduced. The shipping man's patrons will not allow him to deceive himself for a single day. But there are no such prompt monitors for the manufacturer who hesitates to acknowledge the truth.

The manager of a large manufacturing plant, known to the writer, once stoutly declared that "The expense is there and it has to be paid." So, notwithstanding the best efforts of clearer thinkers, he persistently added increasing percentages of overhead as business fell off, until his soaring estimates on contracts drove away nearly all of his company's trade. He was so determined in his unwise course that he permitted subordinates arbitrarily to apportion unabsorbed charges to the estimates of the factory production department, while he in turn added a profit percentage to those already topheavy figures. The breaking out of the war in 1914 and the sudden termination of foreign competition was all that saved the concern from collapse.

The Element of Fair Play

It is difficult to understand why these men will delude themselves into travelling in such a vicious circle, but the practice continues despite the obvious fallacy of their reasoning. The element of fair play also enters somewhat into this situation.

Why should those who continue to patronize the concern in dull times be penalized by higher charges than they pay ordinarily? Have they not a strong incentive to make their purchases just as small as possible, or to look for another source of supply?

But not all calculations are made in that way, although many well-meaning accountants fail to recognize all the factors which enter into falling business conditions in so far as they affect the production department.

In well-managed plants the depreciation of machines falls to practically zero when they are not in use. The belts are thrown off and the machines are slushed down. Power consumption, oil, waste, and other charges are reduced. In extreme cases the assistant foremen are required to work on

BANK OF MONTREAL

Established over 100 Years

Capital Paid Up - - $20,000,000
Rest - - - - $20,000,000
Undivided Profits, $1,812,854
Total Assets - $545,304,809

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The Bank offers a service of the highest order to Canadian manufacturers because of its 180 Branches located in important industrial and agricultural centres throughout Canada.

COLLECTIONS made at all points in Canada and in foreign centres.

DRAFTS—Money Orders and Letters of Credit issued, available throughout the world.

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HEAD OFFICE - TORONTO

direct production and the shop clerical forces are reduced in proportion.

It is not a safe generalization to assume that the overhead continues practically the same in dull times as it is in busy times. A revision of figures may show a material reduction in a department where the value of the equipment is low and the operating costs are high, although there may be an actual increase in other departments.

It is a question whether the irregularities due to lack of exact information concerning these matters do not really cost more and entail greater loss eventually than the moderate expense of correct calculation. Boosting the overhead in dull times certainly does not smooth the path of the salesmen as they try to fill up the empty places in the production department. Again it may be much better to keep going, in order to keep an organization together, even without earning a profit for a time, than to permit accumulated charges to increase until they become alarming.

Cases are not unknown where managers have arbitrarily grouped unassociated departments together for no better reason than their desire to equalize the overhead. The automatic lathe department is sometimes joined with the hand turret lathe department so as to charge a part of the always high automatic department overhead to the much lower overhead of the hand-machine group. That sort of accounting would be ridiculous if it were not so serious. How it affects the costs charged against work done on the hand machines, which cannot be done on automatics, is too apparent to require mention.

Then we often find that the same overhead is charged against the vice hand in a department that is charged against the operator of an expensive machine. Asked why this is so, the accountant will declare that he is too busy to keep track of so many different rates and he has to "strike an average." Now any careful thinker knows that this so-called average may not be an approximation of the real costs.

Every Element is Considered

Is it possible for any method to be reasonably correct which does not recognize the actual facts as they exist in any single case? Many accountants now believe that the machine class rating will give results far more reliable than the other methods. Under this system every element is considered. Power, light, floor space, machine value, and supplies, all enter into the reckoning. The bench man also is charged with his better light, his floor space, his equipment, and his perishable tools.

But someone may object that a special machine which is seldom used may be put into a class by itself, and that a machine class overhead, if logically computed, would place such a burden on that machine's time that its use would be prohibitive. This might be true if the machine is used only one day out of six, but the principle of no pay for idle capital enters at this point. When it is known that the machine will be busy only one day out of six, its power and light consumption and its supplies of oil, belts, and so on, and the cleaner's and sweeper's time, should all be figured on that basis and not as if it were running full time.

Its depreciation also will be much slower than if it were running full time. To figure in some other way by attempting to balance the machine's unearned floor rental against an excessive depreciation, and then hope that the errors will not make enough difference to cause trouble, is taking liberties with chance.

A practical way of improving the situation would seem to be to secure more work which may be done on the machine. If it were procured through someone's mistaken judgment and, though it will never fully pay for itself it seems unadvisable to discard or sell it, a wise course would

be to write off a large part of the first cost, charging it to profit and loss or expense, and then proceed on a rational basis of charge for the time the machine is used. A subordinate naturally hesitates to suggest such measures to the critical manager, especially if the man who should make the suggestion is responsible for the mistake. But sound business principles do not take account of individual preferences.

The writer knows of a prominent plant where the overhead in the automatic department was figured extremely high. It was decided to install twelve hand turret lathes to increase the output by taking light finishing cuts on the work and thus permit the automatics to run without frequent stops for small readjustments of the cutting tools.

The small machines were under the supervision of the automatic department foreman and they were actually a part of that department. But in order to avoid the excessive overhead which would have been placed on them by the accounting practice prevailing there, had they been assigned to the automatic department, the fiction of a separate department with a much lower overhead was established. Thus the correct result was secured by an unbusinesslike subterfuge.

Many a time the writer has seen a profitable contract go to a competitor whose figures were only a small percentage lower than his, even after the padding had been innocently administered by the manager. His protests have sometimes been heeded and sometimes they have not, but the average purchasing agent who makes contracts involving large sums has a way of squeezing out the inflation and of getting right down to hardpan.

These purchasing men know that selling expenses are large, so they aim to do their business in such a way that the cost of making a sale to them is just as low as possible. They are not interested in the size of the sales department of the firm they patronize or in the cost of running it. They understand that the cost of making a large number of small sales is high and that that cost must be met; but they also know that the cost of selling them a large order is very often less than that of selling a smaller buyer a much smaller bill. So they will not allow the same percentage of selling expense to go against their houses. Of course this refers to special contracts, not to negotiations for one-price articles.

Good Judgment Needed

Good judgment is so clearly demanded in estimating that the arbitrary methods of the past must be discarded if business is to be done on equal terms with competitors. It matters much to-day how the special equipment necessary to perform a contract is charged when the estimate is made.

For instance, if some apparatus is required which it is reasonable to suppose will be used on other work, it is most unwise to write its whole cost into a single estimate. For if it is to be made by the contractor, the charge will usually include the full direct cost of labor and material, plus the department overhead, plus the general selling expense, plus administrative expense, plus a profit based on a certain percentage of the sum of these several charges. All of this the prospective purchaser is asked to pay.

Would it not be far better judgment to charge such equipment to either expense or capital, as the case warrants, and then to place only a small part of the cost, without all the extras, on the purchaser?

But someone says that is speculating on the future. Is not all business speculation in part? Good sense is required in such matters, for if a plant is not fairly equipped to fill a contract, that contract will certainly go to one that is.

The purchaser is not interested in plants which cannot meet his needs. He wants to do business with those which can. And he is seldom willing to pay a very large part of

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Convenience, security and economy are secured by the use of Travellers' Cheques issued by this Bank. They enable the bearer to identify himself and are readily converted into the current coin of any foreign country.

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PAID-UP CAPITAL - - - $15,000,000
RESERVE FUND - - - $15,000,000

82A

The Merchants Bank of Canada

Head Office, MONTREAL Established 1864

Paid-up Capital	$ 7,000,000
Reserve Funds	7,574,043
Total Deposits (October 31st, 1919)	165,000,000
Total Assets (October 31st, 1919)	198,000,000

President: Sir H. Montagu Allan, C.V.O.
Vice-President: K. W. Blackwell
General Manager: D. C. Macarow
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Many of the large Corporations and Business houses who bank exclusively with this institution have done so since their beginning. Their banking connection is for life—yet the only bonds that bind them to this bank are the ties of service, progressiveness, promptness and sound advice.

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MERCHANTS BANK CONTINUES TO GAIN

Statement for Half-Year Gives Total Assets of $198,506,572
A NEW RECORD

Deposits Gain $30,117,802

The Balance Sheet of the Merchants Bank of Canada as at the end of the half-year period, 31st October last, received from the Bank's headquarters here on Saturday, shows continued gains and growth on the part of this well-known financial institution.

The Total Assets have now reached the commanding figure of $198,506,572, an increase of $32,582,136 over the corresponding date last year. The readily available portion of the Assets amounts to $84,014,965, an increase of $11,566,688, by which is shown that the liquid position of the Bank has been well maintained.

That the Bank has continued to do its full share, both to the Government and the Commercial Community is shown by an increase of $4,682,244 in securities held of the Dominion and Provincial Governments, while Current Loans and Discounts in Canada have increased by $19,435,478 during the 12 months' period.

Note Circulation at $15,827,373 is $647,130 higher than a year ago with the issue in excess of Paid-Up Capital more than covered by a Deposit of $8,000,000 in the Central Gold Reserve.

The Deposits amount to $166,006,015, against $135,888,213 on October 31st, 1918, being an increase for the period of $30,117,802, of which gain $19,368,746 was in Savings or Time Deposits and $10,749,056 in Deposits payable on Demand—a basis of progress which cannot but be considered satisfactory.

The statement altogether makes very good reading for those who realize the important part that our Chartered Banks play in the well-being of the whole country, industrial as well as agricultural, and the figures are especially interesting, as the period covered, with the exception of 11 days, has been after the date of the Armistice and clearly demonstrates that our large and well-managed financial institutions are continuing their progress and growth on a solid basis with the war a thing of the past.

The main features of the figures of October 31st, 1919, and October 31st, 1918, compare as follows:

BALANCE SHEET
As At 31st October

THE MERCHANTS BANK OF CANADA

STATEMENT TO THE DOMINION GOVERNMENT (CONDENSED)
31st OCTOBER

LIABILITIES

	1919.	1918.
Capital Paid Up	$8,341,535 30	$7,000,000 00
Reserve Fund	7,000,000 00	7,000,000 00
Undivided Profits	574,043 32	437,973 92
Notes in Circulation	15,827,373 00	15,180,243 00
Deposits	164,302,874 18	133,955,910 26
Due to other Banks	1,703,141 06	1,932,303 36
Acceptance under Letters of Credit	757,606 04	418,006 30
	$198,506,572 90	$165,924,436 84

ASSETS

Cash on hand and in Banks	$25,642,136 33	$20,641,022 76
Deposit in the Central Gold Reserve	8,000,000 00	8,500,000 00
Government and Municipal Securities	36,240,352 41	31,558,108 80
Railway and other Bonds, Debentures and Stock	3,870,611 91	3,933,373 19
Call Loans in Canada	6,843,017 57	4,916,574 22
Call Loans elsewhere than in Canada	3,418,846 99	2,899,198 62
	84,014,965 21	72,448,277 59
Loans and Discounts	106,254,280 80	86,818,802 28
Liabilities of Customers under Letters of Credit per contra	757,606 04	418,006 30
Bank Premises	5,663,251 73	5,218,862 63
Real Estate other than Bank Premises	911,291 19	333,872 24
Mortgages on Real Estate sold by the Bank	528,177 93	320,615 80
Deposit with Dominion Government for purposes of Circulation Fund	377,000 00	366,000 00
	$198,506,572 90	$165,924,436 84

the cost of fitting them out. It is better not to bid on a contract at all than to send in a bid so high that it tells a story of inadequacy in the bidder's plant.

Branch in Paris

Park-Union Foreign Banking Corporation Has Placed a Branch in French Capital

Announcement is made by the Park-Union Foreign Banking Corporation, the international bank with which the Union Bank of Canada is associated, that a branch was opened on November 10 in Paris, France, under the management of Mr. George Alfred Carrere. The branch is located at the corner of the Rue Taitbout and the Boulevard des Italiens. This constitutes the fifth branch of the corporation, the others being in Seattle, San Francisco, Shanghai and Yokohama, with head office at 56 Wall Street, New York.

Progress of Merchants Bank

Substantial Gains Are Recorded at the End of the Half-Year on October 31

It has now become customary for the banks to present half-yearly balance sheets, a practice which enables customers and the public generally to keep more closely informed on the progress of these institutions. The half-year of the Merchants Bank of Canada ended on October 31 last, and the statement since issued gives convincing proof of the stability and growth of this particular institution.

It is extremely gratifying to note the splendid expansion in assets, which between October 31, 1918, and October 31, 1919, grew by $32,582,136 to $198,506,572. Of this total, $84,014,965 represents readily available assets, these being $11,566,688 greater than a year ago. During the same period, deposits increased from $135,888,213 to $166,006,015, of which gain $19,368,746 was in savings or time deposits and $10,749,056 in demand deposits.

Both the items, call loans and loans and discounts, show good increases, witnessing to the part played by the Merchants Bank in furthering the business interests of the country. Call loans in Canada were up from $4,916,574, to $6,843,017 and call loans abroad from $2,899,198 to $3,418,846. Loans and discounts expanded from $86,818,802 to $106,254,280. Altogether the statement is one of which the bank should have every reason to be proud and should be a source of confidence to all who have dealings with it.

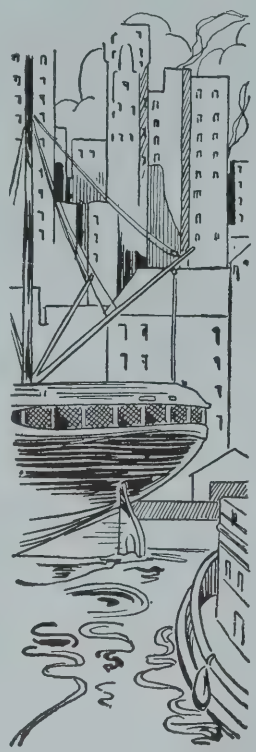
Car Earnings Drop

Very Considerable Reduction in Profits for Fiscal Year Ended September 30

As might have been expected, earnings of the Canadian Car & Foundry Co., Limited, during the transition period from October 1, 1918, to September 30, 1919, were less than those during the last year of war. In figures they show a reduction from $3,252,608 to $1,887,634, both amounts being subject to Government taxes. Out of the latter sum, dividends of 8¾ per cent. were paid on the preference stock, while adding in the previous year's surplus, the amount carried forward was $7,061,556.

The directors, in their report to the shareholders, regard the results as satisfactory. Aggregate sales were $33,000,000 with business practically all in the regular lines of the com-

San Francisco



THE GOLDEN GATE TO THE EAST

FROM San Francisco Bay, the largest harbour on the Pacific coast of the United States, sail the ships that carry the exports of Canada and the United States to Hawaii, Australia, China, Japan, the Philippines, Mexico and Central America.

San Francisco is the Golden Gate to the East; a city of pluck and romance. Almost destroyed, it arose from its ashes and in three years re-built the modern, progressive and important city of to-day.

To exporters and importers, San Francisco should be kept in mind.

Through our direct connection with the Park-Union Foreign Banking Corporation, having branches in San Francisco and Seattle on the Pacific coast; in Shanghai in China; Yokohama in Japan; in Paris, France; our own New York agency at 49 Wall St., and our two branches in London, Eng., we are able to offer every banking facility for the transaction and extension of foreign business throughout the world.

Our officers will be glad to advise Canadian business men regarding their foreign trade activities.

UNION BANK OF CANADA

Park-Union Foreign Banking Corporation jointly owned and controlled by National Park Bank of New York and Union Bank of Canada

382

THE ROYAL BANK OF CANADA

Capital Paid Up	$14,000,000
Reserve and Undivided Profits	15,500,000
Total Assets	427,000,000

HEAD OFFICE - MONTREAL

BOARD OF DIRECTORS:

Sir Herbert S. HOLT, Pres. E. L. PEASE, Vice-Pres
E. F. B. JOHNSTON, K.C., 2nd Vice-Pres.

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G. R. Crowe	A. E. Dyment
D. K. Elliott	C. E. Neill
Hon. W. H. Thorne	Sir Mortimer B. Davis
Hugh Paton	G. H. Duggan
Wm. Robertson	John T. Ross
A. J. Brown, K.C.	R. MacD. Paterson
W. J. Sheppard	W. H. McWilliams

OFFICERS

E. L. Pease, Man. Director, C. E. Neill, Gen. Manager; F. J. Sherman, Asst. Gen.-Manager; M. W. Wilson, Supt. of Branches.

Branches in every Province of the Dominion of Canada and in **Newfoundland**; in **Havana** and throughout **Cuba**, Porto Rico, Dominican Republic, Costa Rica, and Venezuela; **Antigua**, St. John's; **Bahamas**, Nassau; **Barbados**, Bridgetown, **Dominica**, Roseau; **Grenada**, St. George's; **Jamaica**, Kingston; **Montserrat**, Plymouth; **Nevis**, Charlestown; **St. Kitt's**, Basseterre; **Trinidad**, Port of Spain and San Fernando; **British Guiana**, Georgetown, New Amsterdam and Rose Hall (Corentyne); **British Honduras**, Belize.

SPAIN, Barcelona—Plaza de Cataluna 6.
LONDON, England, OFFICE—Princes St., E.C.
NEW YORK AGENCY—Cor. William and Cedar Sts.
(Savings Department at all Branches.)

pany's products. In the previous year the aggregate was $45,000,000, of which one-fourth was munition work. Reporting on the outlook, it is stated that the car company has orders on hand which will carry it into next year, but after that the future is uncertain. Serious thought is being given to diversifying the output from the various plants. New lines are being considered. It is improbable that further shipbuilding orders will be taken. The condition of plants is generally satisfactory, and the financial position is also satisfactory, with no indebtedness to any bank.

A Gratifying Statement

Bank of Montreal's Annual Report Shows Readjustment to Post-War Conditions

Special interest attaches to this year's annual statement of the Bank of Montreal, because it shows how satisfactorily this great financial institution is meeting peace conditions. The Bank's year ended on October 31st, which means that nearly the whole period has been spent under the new conditions. During the war the Bank assumed heavy commitments to assist the financing of the Dominion and Imperial Governments. Since the Armistice was signed, trade and manufacture have received special attention through the medium of current loans.

As might have been expected, there has been a decrease in total assets, though this was experienced during the first six months of the year. Since then assets have shown a substantial growth. At October 31st total assets stood at $545,304,809, as compared with $558,413,546 a year ago and $489,271,197 at April 30th.

While the various readjustments were being effected, a strong liquid position has been consistently maintained, and as a result liquid assets amount to $337,980,858, being 67.99 per cent. of the liabilities to the public. The expansion that has occurred in trade and commerce is reflected by an increase in current loans of approximately $18,000,000 and these now amount to $164,182,591, as compared with $146,028,861 a year ago.

The various campaigns for thrift, which were inaugurated during the war period, are also apparently having a good effect. As a result, deposits bearing interest have gained to $312,655,964, as compared with $268,167,111, at the end of the first six months. Deposits not bearing interest also show a gain and now stand at $129,946,641, up from $124,736,111, at the end of April last.

Since the close of its last fiscal year the Bank has also completed, without inconvenience to the public, the absorption of the Bank of British North America, both capital stock and rest account being increased to $20,000,000 respectively, as compared with $16,000,000.

The Profit and Loss Account, in turn, reflects the larger business handled, and the total profits for the year amount to $3,314,227, or 16.57 per cent. on capital.

Branch in Buenos Aires

Royal Bank of Canada has Announced Opening of a Branch in Argentine Republic

C. E. Neill, General Manager of the Royal Bank of Canada, announced on November 10 the opening of a branch in Buenos Aires, Argentine. It will be under the management of Mr. T. F. Diver, late manager of the branch in Barcelona, Spain, and formerly supervisor of Cuban branches. The Royal Bank now has 68 branches in the West Indies, Central and South America.

There is no such a condition as "holding your own". You are either in a worse or better condition than a year ago. Our staff of specialists can assist you to progress. Write to-day

Thorne, Mulholland, Howson & McPherson

INDUSTRIAL ADVISORS

Bank of Hamilton Building Toronto, Ont.

Established 1849

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Capital and Surplus - - $1,500,000

Offices Throughout the Civilized World

Executive Offices: Nos. 346 and 348 BROADWAY, N.Y. CITY, U.S.A.

The Bradstreet Company gathers information that reflects the financial condition and the controlling circumstances of every seeker of mercantile credit. Its business may be defined as of the merchants, by the merchants, for the merchants. In procuring, verifying, and promulgating information, no effort is spared, and no reasonable expense considered too great, that the results may justify its claim as an authority on all matters affecting commercial affairs and mercantile credit. Its offices and connections have been steadily extended, and it furnishes information concerning mercantile persons throughout the civilized world. Subscriptions are based on the service furnished, and are available only by reputable wholesale, jobbing and manufacturing concerns, and by responsible and worthy financial, fiduciary, and business corporations. Specific terms may be obtained by addressing the Company at any of its offices. Correspondence invited.

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Edmonton, Alta. Hamilton, Ont. London, Ont.
Halifax, N.S. Ottawa, Ont. Quebec, Que.
Montreal, Que. Toronto, Ont. Vancouver, B.C.
St. John, N.B. Winnipeg, Man. Calgary, Alta. Victoria, B.C. Sydney, N.S.

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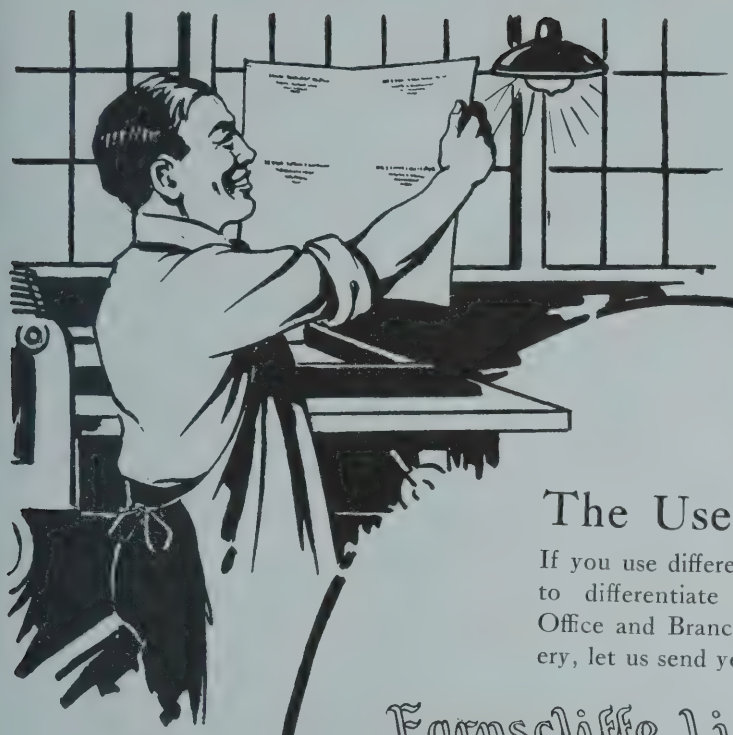
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Closet Seats, Flush Tanks, Medicine Cabinets,

Everything for the Bathroom.

Write for Catalogue C and Price List.





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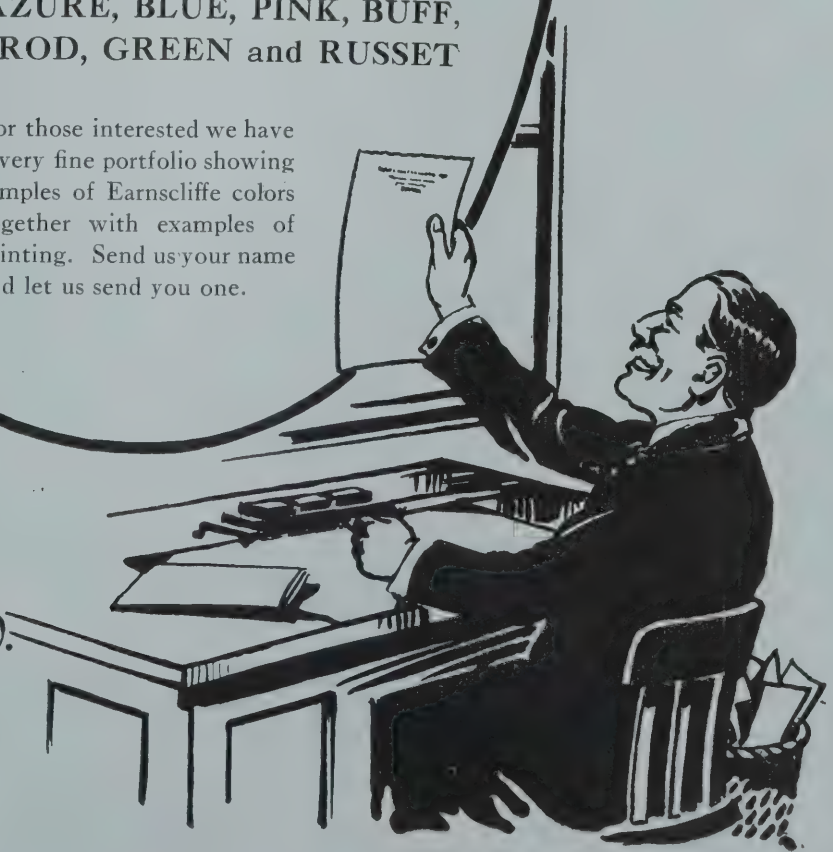
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White and Eight Tints

Previous to date **"Earnscliffe,"** which has been known to buyers for years, was made in White, Azure and Buff only. It is now made in the following:

WHITE, AZURE, BLUE, PINK, BUFF, GOLDEN ROD, GREEN and RUSSET

For those interested we have a very fine portfolio showing samples of Earnscliffe colors together with examples of printing. Send us your name and let us send you one.



Made in Canada by
The Rolland Paper Co.
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You probably look on your filing system as a place where so many letters and papers are stored.

But your filing clerk? She isn't fortunate enough to be able to look at it in such an easy, buoyant manner. With her it's a serious part of routine.

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With her the *proper system* means the difference between a slow, cumbersome, inaccurate way, fraught with many delays—and a speedy, accurate and efficient method of filing.

"Office Specialty" Systems of Filing and Record Keeping are fundamentally right. A proper principle of organization underlies each one of them. Each system is designed for a specific purpose and it achieves that purpose in a way that extensive study has demonstrated to be the best.

"Office Specialty" System Service, Dominion-Wide in its scope, is offered to any business organization without fee or charge.

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We back the paper with this watermark against all comers for

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Barber-Ellis Limited

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ENVELOPE MANUFACTURERS AND PAPER DEALERS

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CANADA'S INDUSTRIAL EXPANSION

Continued from page 71

Another Paper Mill

Price Brothers & Co., Limited, Decide Upon Erection of Another Mill in Saguenay District

An announcement has been made by Sir William Price, president of Price Bros. & Co., Limited, Quebec, that the directors of his company have decided upon the erection of another paper mill. This will be erected at a point three or four miles east of Chicoutimi, where a new town called Saguenay will be laid out. There the mill will be on tide water. Sir William Price's statement was as follows:

"My board has definitely decided to start without delay on a large newsprint mill in the Saguenay district, with a capacity of between four and five hundred tons. Work has already been started on the necessary waterpower, and by May of next year construction of the mill will be under way.

"A further machine is now being erected in our Kenogami mill. This machine would have been working now had it not been for the strikes in England. This brings our present output up to 270 tons, or, including Jonquiere, 325 ton, per day of paper and board, in addition to sulphite pulp. When our new plant is operating, our total output of paper and board will be in the neighborhood of 800 tons per day."

It has also been announced that the same company will erect another big sawmill at Matane.

From Munitions to Motors

Willys-Overland, Limited, Have Made Rapid Progress in Changing Over Plant

The progress made by Willys-Overland, Limited, West Toronto, in transforming their factory from a munitions plant to its present stage of peace production affords another instance of the way in which Canadian manufacturers are meeting changed conditions. During the war, the entire plant was devoted to the construction of airplane motors and munitions, and with the cessation of this work immediate steps were taken to manufacture automobiles. The decision was made to concentrate, at least at first, upon the new light model Overland 4, which had undergone exhaustive tests and was calculated to revolutionize the motor car industry through the introduction of the "three-point suspension springs," which it had been proved would give the most surprising riding qualities.



Mr. J. G. Perrin
Assistant General Manager, Willys-Overland, Limited



Putting on the Finishing Touches
Scene in the Willys-Overland plant as the new light model Overland 4 comes down the runway

Mr. T. A. Russell, who became president and general manager this year, surrounded himself with able executives and technical experts, whose total factory and office staff last May numbered only 229. Gradually, yet with rapidity, machinery was installed and sources of steady supply of raw material established, so that each month the company was able to use additional men. Within a few months, actual motor car production was reached, and within the past few weeks it has attained a quantity that ensures it as a permanent and growing industry. At the middle of November, the number of employees had increased to nearly 1,300, all their efforts being directed to the production of the Overland 4. The new car has had a favorable reception from one end of Canada to the other, and as contracts already made are sufficient to keep the factories busy for a year or more, Willys-Overland, Limited, promises to take its place permanently among Canada's leading industries.

Increase Payroll 50 per Cent.

Guelph Carpet & Worsted Spinning Mills, Limited, Make Important Plant Additions

Considerable enterprise is being shown at the present time by the Guelph Carpet & Worsted Spinning Mills, Limited, one of the largest textile industries in Canada. Since the amalgamation early this year of the Guelph Carpet Mills Co., Limited, and the Guelph Worsted Spinning Co., Limited, under the new name and management, the Company have made rapid progress and many improvements are noticeable. Recently new offices and showrooms were built on an elaborate scale, and now the work is just being completed on a large extension to the worsted spinning department. The cost of the new plant and machinery is over $300,000, and will be in operation in the spring.

The present plant in full operation employs 400, whilst this new development will increase the payroll about 50 per

Steel Building For Sale

Tenders will be received up to 15th December next, by the subscribers, subject to previous sale, for the purchase of the Steel Building 300 ft. long, 100 ft. wide and 32'6" in height from floor to eaves, 38'9" at peak, and containing approximately 640,000 lbs. Structural Steel, now standing on the property formerly owned and operated by the Nova Scotia Car Works, Ltd., in the City of Halifax, and used by them as a Steel Erecting Shop.

The Building Measures 300 ft. by 100 ft.

——Consisting of 20 panels, 15 ft. centres making a total length of 300 ft. and width of 100 ft.

Each panel consists of two outside columns, 10 x 10 H. Steel Bars, 49 lbs., also centre columns H. Steel 12 x 12, 71.6 lbs.

Purlines consist of 18 6" I. Beams, 12.25 lbs.

Side Channels 12 5" I. Beams, 6.5 lbs.

The Roof Truss is made up of angles, approximately, 2½ x 2" x 5/16".

There is a double set of Crane Girders down the length of the building as follows:

2 24" I. Beams, 80 lbs. with 18" Channels, 15 lbs., these I. Beams are fastened to the Columns with Steel Brackets.

The Building to be taken down and removed from its present site before 1st March, 1920. Any further particulars desired will be furnished on application. The lowest or any tender not necessarily accepted.

Canada Corporations, Ltd.

Cor. Hollis and Prince Streets, Halifax, N.S.

cent., enabling this institution to claim the premiership in the country of its kind. Besides manufacturing woollen and worsted yarns of all grades and qualities on a large scale, used for all purposes in knitted garments by the numerous knitting mills in the Dominion, they are extensive manufacturers of floor coverings in tapestry, velvet, Axminster, Brussels and Wilton designs.

Knitting Mills Being Enlarged

Two Mills of Penmans, Limited, in Quebec Are Being Extended to Meet Trade Requirements

Due to increased demand for the company's goods both for home and foreign consumption, Penmans, Limited, manufacturers of knit underwear and hosiery, are at present making additions to their mills at Coaticook and St. Hyacinthe, Quebec. The former extension consists of a three-storey erection, 60 by 100 feet approximately. The latter is 25 by 40 feet, two storeys high. Both are of brick, standard mill construction and sprinklered throughout.

Mr. I. Bonner, general manager, reports that with the exception of one or two lines, the demand for the company's product is good. Export business developed to date is such as to keep the mills fairly well occupied all the time; in fact, some of them are booked for a number of months ahead. In certain underwear and hosiery lines, production is entirely limited to the quantity of help available, which in Ontario is a very serious matter at the present time.

More Space Needed

In Anticipation of Increase in Export Business, Bicycle Manufacturers Tack Addition to Plant

An extension, which will add approximately 16,000 square feet of floor space to their plant at Weston, Ont., is being erected at the present time by the Canada Cycle & Motor Company, Limited. The company's plant is of the modern, one-storey, saw-tooth-roof style of construction and the addition will harmonize with the original building. It is expected that the work of erection will be completed before the end of the year.

Expanding export business is the reason back of the enlargement. The company have always done more or less foreign business and indications now are that this department will grow to such an extent in the next few years that greater manufacturing facilities will be needed. On completion the addition will be utilzed for storage purposes, though it will be gradually absorbed in the manufacturing end as the need for space arises.

Clothing Manufacturers Build

Capacity of Plant of W. E. Sanford Mfg. Co. at Hamilton to be Increased by New Erection

With the object of improving working conditions and increasing production, the W. E. Sanford Manufacturing Co., Limited, Hamilton, are erecting a new building in the vicinity of their plant at King and John streets. The new structure is 40 x 140 feet, three storeys high and of reinforced concrete construction. It is being built entirely for manufacturing purposes and will be ready for occupancy about January 1. While erected primarily for the better housing of employees

Tweed, ONT.

IDEAL LOCATION for MANUFACTURING Hydro Electric Power—Good Shipping Facilities, C.P.R. and C.N.R. Free Taxation Factory for Rent now.

Write Secretary, Board of Trade, for Particulars

REES' RoTURBo
PUMPING MACHINERY

Is used the world over in Modern Industrial Plants, Power Stations, Waterworks, Mines, Pulp and Paper Mills, Salt and Chemical Plants, where highest efficiency, reliability and high-class engineering are demanded.

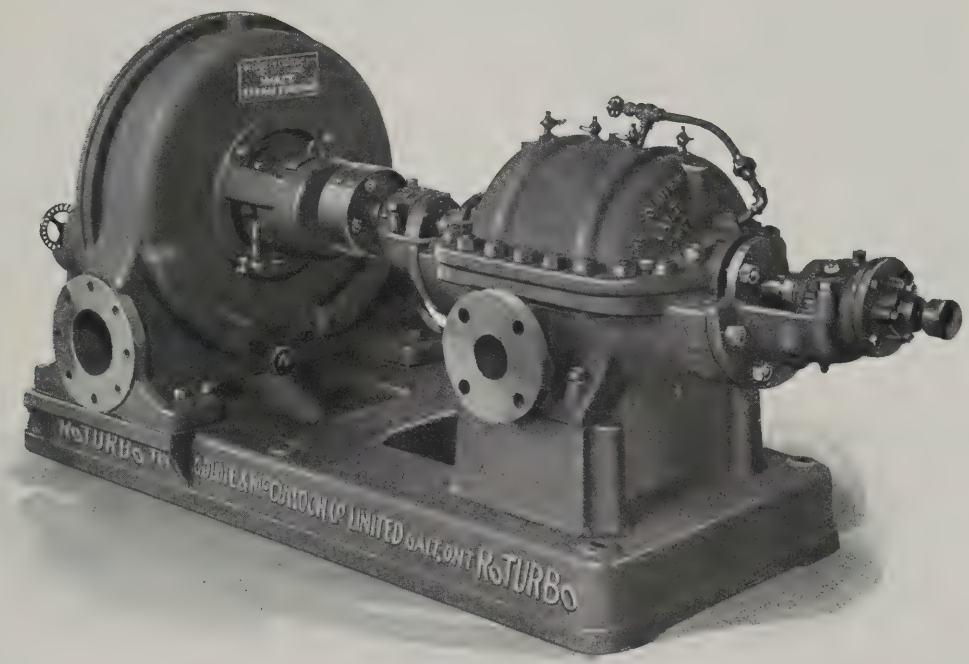


Illustration shows a REES' RoTURBo Multi-stage Pump direct connected to Goldie & McCulloch "WAIT" Steam Turbine, recently built for the Salts & Potash Co. of Canada, Limited, for pumping brine.

REES' RoTURBo Pumps provide a very high and sustained efficiency over a wide range of duties which means a saving in power costs. The self-regulating feature of RoTURBo design is responsible for this saving, and this same feature protects your prime mover from overloads on a decreased pressure head, eliminating expensive delays and costly repairs.

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Original Ewart LINK-BELT

We are the original manufacturers of this type of Link-Belt, and have been manufacturing it in ever-increasing quantities for nearly half a century. Our product always has been, and is to-day, recognized as the standard.

This is just one of the many types of Link-Belt which we make in Canada for every service in all classes of manufacturing plants. We carry the widest variety of sizes and have the most extensive available stock of any concern in Canada.

Write us about your requirements.

CANADIAN LINK-BELT CO., LTD.

Wellington and Peter Streets
TORONTO

Also carried in stock at 1195 St. James Street, MONTREAL, Que.

and so that manufacturing might be carried on under improved conditions, the building will naturally give greater capacity for production and the company expect an increase in output of about 10 per cent. At present they have all the business they can attend to. Great difficulties are reported in securing materials and, owing to the shortage of skilled labor, manufacturing is retarded. Both conditions militate against their being able to engage in export trade to anything more than a limited extent.

Partridge Rubber Expands

Expect Shortly to Increase Number of Hands in Guelph Factory from 350 to 500

When an extension now under way is completed, the F. E. Partridge Rubber Co., Limited, of Guelph, will augment the number of its employees from 350 to 500. The addition to the building is 100 x 60 feet, four storeys high. This company have had a very rapid growth. Organized in Montreal in 1915, the plant was transferred to Guelph in 1916. It at first occupied a small building but additions have been made almost continuously until the company now occupy a modern five-storey structure. Besides making the Partridge line of tires and rubber tubes, the company manufacture a complete line of rubber sundries, including hot water bottles, tobacco pouches, etc., the daily output being 475 tires, 600 tubes, 500 hot water bottles, and 1,000 tobacco pouches. With the increased facilities for manufacturing, the company soon hope to increase their daily output to 800 tires with a proportional increase along other lines.

Toric Lenses Now Made in Canada

Imperial Optical Co., Toronto, Now Manufacturing These Lenses on Factory Basis

The Imperial Optical Co., Toronto, have built and installed 40 automatic multiple Toric lens grinders, and polishers, and are now manufacturing these lenses on a factory basis production, using the same methods as those employed by the largest lens grinding manufacturers in the United States. They are figuring on putting an addition to their present building to accommodate additional machinery for lens grinding.

Adding to Plant

Otto Homuth of Preston, Ont., is Erecting Building for Storing and Grading Rags

Additions to the plant of Otto Homuth, manufacturer of woolen shoddies and grades of woolen rags, Preston, Ont., are being made at present. These consist of a building, 100 x 45 feet, two storeys high, mill construction, to be used for the storing and grading of rags and a boiler house 37 x 37 feet with 65-foot cement chimney. Mr. Homuth intends to instal a 75 h.p. boiler for heating both the new building and the present plant, and he expects to have the enlargement completed before the end of the year.

Progress at Ojibway

Canadian Steel Corporation Have Made Good Start this Year on Their Big Plant

Considerable work of a preliminary nature has been accomplished at the site of the Canadian Steel Corporation's projected plant at Ojibway, Ont., this year. A number of underground sewers and drains have been laid; a considerable amount of permanent and temporary railroad tracks has been constructed and a vessel slip and docks built. The slip is 2,400 feet long, 202 feet wide, with 23 feet depth of water. The dock is all massive concrete work, upon 75 and

By Product Coke

Hamilton Pig Iron

Open Hearth Steel Billets

Steel and Iron Bars

Open Hearth Steel Sheets

Quality

Drop Forgings

THE

STEEL COMPANY

OF

CANADA

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HAMILTON MONTREAL

Service

Railway Fastenings

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Wire & Wire Products

80-foot piles driven to rock; it will be completed, with the exception of dredging, this fall. Excavations have been made for four blast furnaces and the foundations are practically completed for two. All foundations are supported upon piles driven to rock. The contract has been let for the steel work for two blast furnaces and is now in the shops for fabrication. The steel work for the permanent machine shop and field fence shop is also being fabricated. It is the hope of the Corporation that conditions next year may be such that work can be pushed with greater vigor.

50 per Cent. More Capacity

Another Storey being Added to the Plant of the National Acme Co., Montreal

By adding another storey to their main building, which is approximately 430 x 55 feet in size, the National Acme Co., Montreal, manufacturers of milled screws, nuts, bolts and special parts, expect to be able to increase their output by 50 per cent. The addition to the plant has been rendered necessary by the increased volume of business being booked, particularly from automobile manufacturers. The work of enlargement will probably be completed by January 1. When under operation, the extended plant will require the services of from 75 to 100 additional hands.

Will Make Tungsten Lamps

Canadian Westinghouse Co., Limited, are Establishing New Industry at their Hamilton Works

Contracts have recently been let by the Canadian Westinghouse Co., Limited, for the remodelling of their west end plant, which was used continuously throughout the war period by the Militia Department. This plant will be used for the manufacture of tungsten lamps. The management expect that production will be commenced within the next four or five months. It is impossible to say how many additional employees will be needed, but the number at the outset will be quite limited.

Building Power Plant

Bathurst Lumber Co., Limited, Spending Million Dollars on New Power Development

About a million dollars is being expended by the Bathurst Lumber Co., Limited, Bathurst, N.B., on an important power development at Grand Falls on the Nepisiquit River, twenty miles from Bathurst. The Falls have a natural drop of 84 feet. The company are building a reinforced concrete dam, which will raise the head from 100 to 110 feet. Two turbine generators, each developing 4,500 h.p., will be installed and provision is being made for another unit of the same capacity to be installed later on as required. The power will be transmitted over steel poles to the pulp and saw mills at Bathurst and the whole operation will be complete and in service by the end of 1920.

Greater Brick Capacity

Citadel Brick & Paving Block Co., Limited, Quebec, Will About Double Its Output

By February 1st, the Citadel Brick & Paving Block Co., Limited, Quebec, expect to have completed a plant enlargement which will increase their annual output of bricks from eighteen to thirty-five million. They are adding to their present battery of three kilns, four round down-draft brick kilns of a capacity of 100,000 bricks each, these being all connected together according to the Minter System and equipped with electric motors and fans for artificial draft. To their system of dryers, they are adding twelve 110-foot

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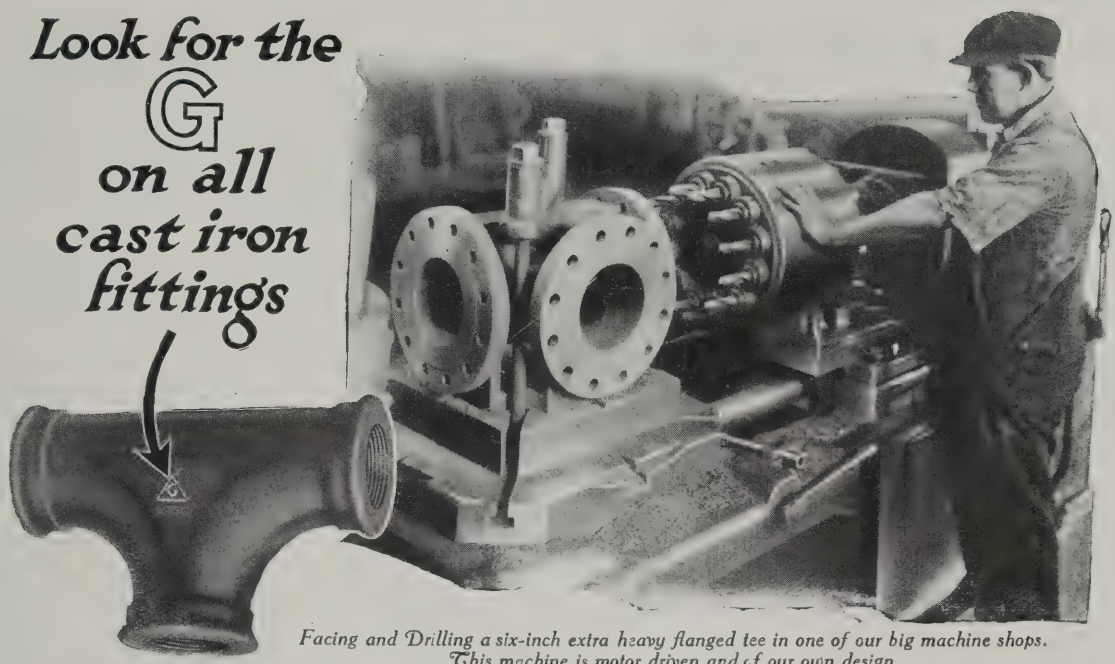
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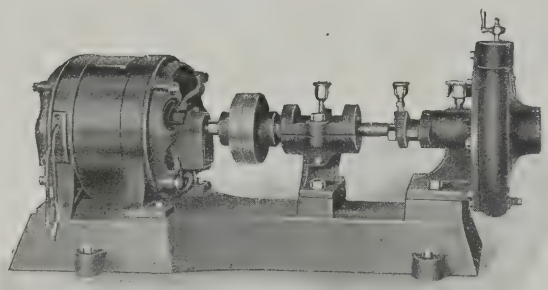
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It stops the drips and consequent oil-soaked floor.

Write for Bulletin

Hamilton Motor Works, Limited
HAMILTON, CANADA

waste heat dryer tunnels, with capacity of drying 40,000 bricks per 24 hours. These dryers are equipped with electric motors, fans, etc., and will be the most up-to-date dryers in the country. The company are also putting in additional machinery to take care of increased production, such as heavy duty dry pans for pulverizing shale, single roll crusher for crushing shale, new Freese cone-clutch wire-cut brick machine, new pug-mills, etc. When all improvements are carried out, the plant will be producing 10,000,000 high-grade rustic face bricks, 25,000,000 builders' shale bricks, and 1,000,000 square feet of hollow ware a year. The cost of the enlargement will be about $100,000.

Preparing for Mill Erection

Nashwaak Pulp & Paper Company Construct Dam and Power House on Nashwaak River

As a preliminary to their proposed development on the Nashwaak River in New Brunswick, the Nashwaak Pulp & Paper Co., Limited, of St. John, N.B., and New York, are at present completing the construction of a dam and power-house about 3½ miles from the confluence of the Nashwaak and St. John Rivers. It is expected that the dam, which will develop about 1,000 h.p., will be completed this fall. The company have not yet decided as to when they will begin the construction of their pulp mill and, according to Hon. N. M. Jones, the manager, no definite action will be taken until labor conditions are more settled. In the meantime the company are continuing to operate their mill at St. John, formerly the mill of the Partington Pulp & Paper Co.

Open Branch Plant

Hall, Dent Canada, Limited, Forced by Labor Shortage to Branch Out

Owing to the difficulty of securing sufficient labor in London, where they are operating two plants, Hall, Dent Canada, Limited, started a new branch plant last month in the village of Zurich, Ont., where they will manufacture silk and chamois dressed gloves. They have rented a vacant factory building which will accommodate from 50 to 60 hands. The move is in a sense experimental, but if adequate labor is available, the industry will no doubt be extended. This is the plant which was reported last month as having been established by Mr. H. Gundel, Mr. Gundel being superintendent of the London plants.

New Paint Industry

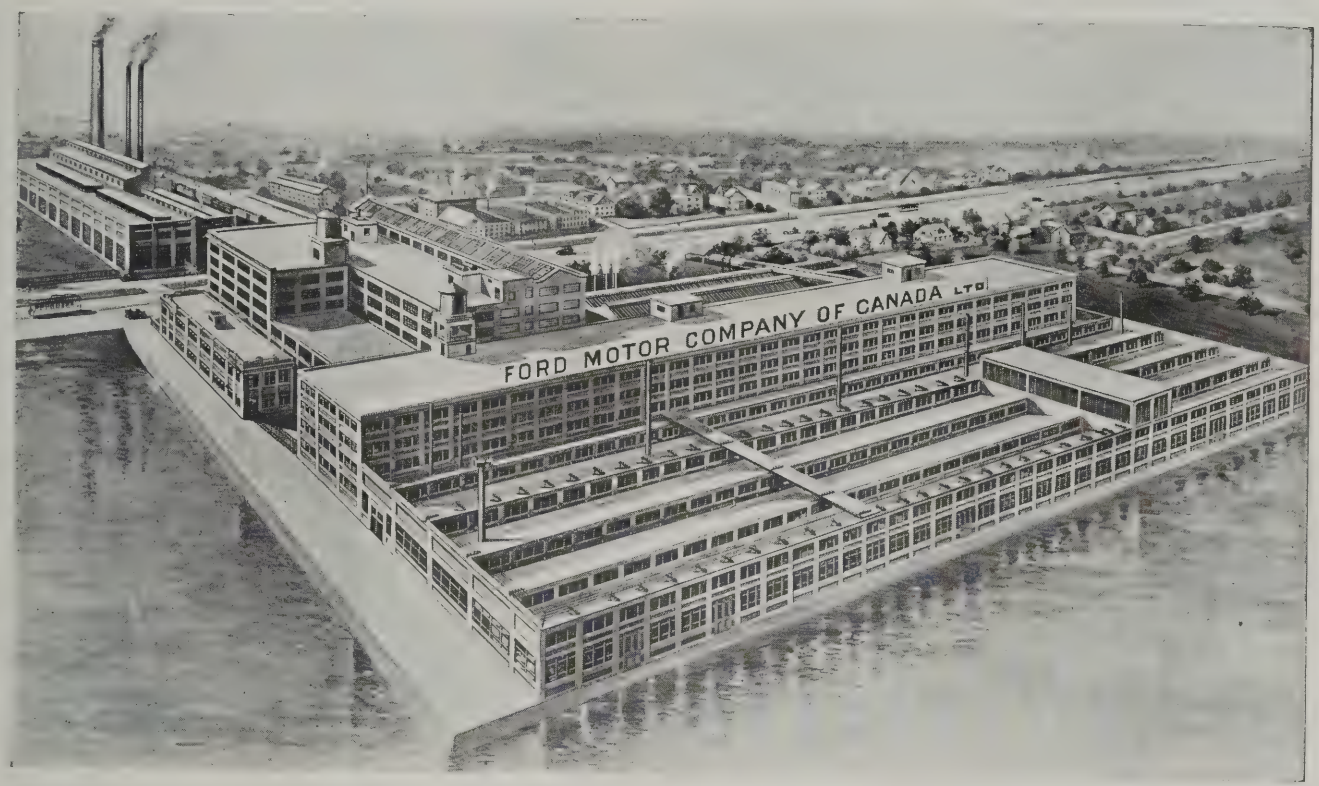
Winnipeg Wholesale Hardware Dealers Are Building Plant in St. Boniface

A paint factory is being erected in St. Boniface, Man., by Marshall-Wells Co., Limited, Winnipeg. It is a building 80 x 80 feet, four stories high, of reinforced concrete, and will cost approximately $90,000. The Company expect to spend upwards of $300,000 for equipment, purchasing only the most modern machinery, and will manufacture paints and paint specialties, to be sold under the brand of "Mars-Wells." They hope to start manufacturing by January 1.

McClary Enlargements

Quarter of Million Being Spent on Two Additions to Plant in London

Two new buildings are being erected by the McClary Mfg. Co., London. One of these is in connection with the tinware and enamelling departments and consists of a shipping building, being built on York Street, with spur track to facilitate handling of raw materials and manufactured goods. The other is in connection with the foundry department and is a building to be used for woodwork and box



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Automobile am at present using..... Motor Oil. I will be in the market for more oil again about ..... and you may quote me on ..... gallons En-ar-co National Motor Oil.

manufacturing, as they cut up a good deal of lumber annually for their own use. The latter building will be 80 x 120 three stories, and will cost about $150,000. The former will cost approximately $100,000. These buildings do not really constitute any addition to the productive capacity of the plant, which for the past year has been worked considerably under capacity, owing to the difficulty of securing skilled help. They have plenty of room for expansion, provided men and materials were available, but the difficulty of procuring materials at present is very acute and the probabilities are that they will be considerably handicapped in this respect for some months to come.

One-Third More Capacity

Hosiers, Limited, Woodstock, Contemplate Making Considerable Enlargement to Their Plant

Though only completed quite recently, the plant of Hosiers, Limited, Woodstock, is about to be enlarged by the addition of an extension, 50 x 60 feet, three storeys high, which will increase present capacity by about one-third. The present mill is 50 x 70 feet, of terra cotta brick and mill construction, three storeys high. About 80 operators are employed, the equipment consisting of 108 machines. This will be increased to 140 machines when the extension is completed. The company are engaged in making hose, the present output representing a turn-over of $350,000. H. W. Austin, of the "P.K." Company, Montreal, is president; K. W. Harvey, of the Harvey Knitting Co., is vice-president and managing-director; James Bassett, secretary-treasurer; and W. A. Shakman, vice-president and managing-director of Julius Kayser & Co., New York, and W. W. Naylor, Toronto, directors.

Complete New Plant Proposed

Renfrew Machinery Co., Limited, Have Ambitious Program of Plant Extension in View

The Renfrew Machinery Company, Limited, Renfrew, Ont., are at the present time considering the further enlargement of their manufacturing facilities, for the purpose of meeting the increase in business in cream separators and scales, as well as to provide space for the manufacture of tractors and stationary engines. They will really build a complete new plant and not extend their present plant. However, as this will be somewhat of an undertaking, they will not likely start on the construction of the new building until the spring of 1921.

Big Flour Mill for Calgary

Work Progressing Satisfactorily on 6,000-Barrel Mill for Alberta Flour Mills, Limited

The work of erecting the 6,000-barrel mill for the Alberta Flour Mills, Limited, in East Calgary, has now reached the second storey stage, and if nothing unforeseen happens the mill will be completed in time to operate on some of the 1920 crop. The work of construction was started in the early summer, and the heavy work is now done. Accompanying the mill is an elevator capable of storing one million bushels of wheat. The mill-site comprises ten acres of ground with a 2,000-foot frontage on the main line of the C.P.R.

Referring to the development, Mr. J. Albert Burgess, financial agent of the company, says: "There is now no question in the mind of the student but that Western Canada has great advantages in the manufacturing and domestic sale and export of flour. The market for the millfeed is in Alberta, and the millfeed is very necessary to the successful building up of the live stock industry. A large mill at Calgary has all the advantages that an eastern mill has for the sale of its products in

Canadian Carbonate Company, Limited

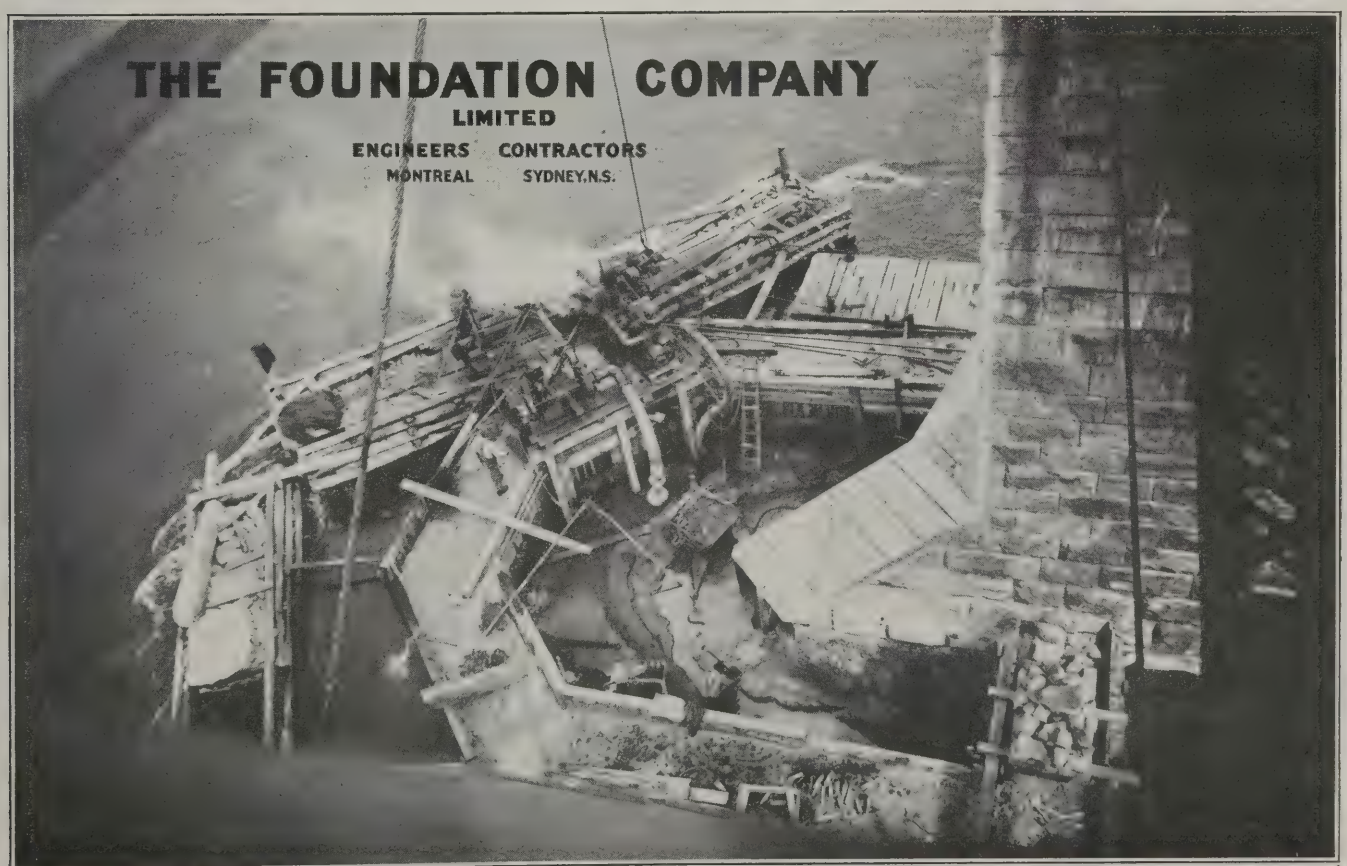
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The photograph shows the Foundation Company Limited repairing a bridge pier that has been undermined. The upstream end of the pier has been coffer-dammed and the site unwatered preparatory to actual repair work. The very fast current necessitated the use of breakwater cribs, as can be seen plainly in the picture.
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the east, and by eastern ports to Europe and, what the eastern mill cannot have, the advantage of the shipments west by Vancouver to the Orient, the west coast states and the west coast of South America."

George Lane, the well-known rancher, is president; A. E. Cross, vice-president, and E. E. Stevens, general manager of the company. One million dollars of the $2,500,000 capital stock has been subscribed by some 600 farmers and ranchers of Alberta. All stock offered has been on a straight basis of $100 per share, without any bonus or promotion stock.

Open Branch Plant

Canadian H. W. Gossard Co., Limited, Secure Premises in Town of Drummondville, P.Q.

A factory building in Drummondville, P.Q., has been leased recently by the Canadian H. W. Gossard Co., Limited, Toronto, manufacturers of corsets, etc., and this is now under operation. In the meantime the branch plant in the Wrigley Building, Toronto, has been closed and its organization consolidated with the main plant at 284 King St. West. Reports that both Toronto plants would be closed and that a large new factory would be erected by the company at Drummondville are incorrect. What may ultimately happen is unknown, but there is no likelihood of the Toronto plant being closed for several years and the erection of the new building at Drummondville is contingent upon the labor outlook. The present branch, which is about the same size as the Toronto plant, is intended to try out the situation, and so far the experiment has proved successful.

Varnish Company Extends

Holland Varnish Co., Limited, are Putting Up Addition to Relieve Pressure on their Plant

In order to relieve the congestion in their present plant, the Holland Varnish Co., Limited, Montreal, are putting up an addition which will enable them to handle a much larger volume of business. The plant as originally designed was built to handle a business of a quarter of a million dollars per annum. Although several extensions and alterations have been made during the past three years, the additions have not been sufficient to enable the company to cope with business now running over a million dollars per annum. The present extension is calculated to give the plant this capacity. The company hope to have the building completed within the next few months, but it will take some time to get the machinery installed as deliveries are very slow.

Enlarge Fergus Plants

Beatty Bros., Limited, Carry Out Programme of Extension, Greatly Increasing Capacity

The business of Beatty Bros., Limited, Fergus, Ont., manufacturers of stable equipment, washing machines, pumps, ladders, churns, etc., has grown so rapidly that they have found it necessary to increase their buildings in Fergus considerably. They already have two large factories in Fergus, and extensions are being built to both. To the west of the saw-tooth building they are building an extension, 96 x 144, for increased storage and shipping space. At the other end, to the east, they are adding an extension, 96 x 168, to provide

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MANUFACTURERS OF
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loading Spruce Deals for Great Britain at Wharf Mill No. 2, Bathurst Lumber Co., Limited, Bathurst, N.B. Both Steamers were just commencing deck loads when photo was taken, and were drawing 16½ ft. water. They will draw 20½ ft. when completed. The "REDCAP" carries about 3,000,000 ft. and the "KYLEAKIN" about 3,500,000 ft. They were loaded at the rate of about 650,000 ft. per day of 10 hours.

BATHURST LUMBER CO., LIMITED

BATHURST. N.B.

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The retail business man observes with pleasure the ready sale of *McClary's* dominating quality products. These products, well handled, sell rapidly, because each article sustains the character of *McClary's* superior quality maintained undiminished over a period of seventy-two years.

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increased manufacturing facilities. The wood working plant on the Grand River is being enlarged by an addition, 150 x 100, and a large new dry kiln is being erected. All this work is well in hand and will be finished early next year. When these extensions are finished it is expected that the output will be doubled. These additions are quite independent of the recent acquisition by this firm of a plant on Bathurst St., London, Ont., and other alterations and improvements to their factories in London.

Building New Plant

Julius Kayser & Co., Limited, Spending $300,000 on Four Buildings in Sherbrooke

A complete new plant is being erected by Julius Kayser & Co., Limited, at Sherbrooke, P.Q., which will permit of much larger production. The plant consists of a single structure divided into four separate buildings. The main erection is 300 feet long, three storeys and basement, and is divided into two parts, one 135 feet, and the other 165 feet long, the former being 60 feet wide and the latter 50 feet wide. In addition there is a weaving room, 48 x 110 feet, and a room for dressing silk, 40 x 100 feet, these being each one storey high. The floor space is approximately 80,000 square feet, and the cost of construction will run to nearly $300,000. Unless unforeseen conditions arise, the company expect construction to be completed by March 1, though it will be several months after that date before they will be prepared to operate on a large scale.

Oil Cloth Co. Reorganized

Montreal Industry Will Now be known as the Dominion Oilcloth & Linoleum Co., Limited

A reorganization of the Dominion Oil Cloth Co., Limited, took place on October 31, when all the company's undertaking, property and assets were transferred to a new company, known as the Dominion Oilcloth & Linoleum Co., Limited, a company recently incorporated at Ottawa with an authorized capital of $5,000,000. The transfer does not involve any change in either management, organization or control, which all remain as before.

Contracts have recently been let for certain new buildings. Referring to these developments, John Baillie, managing-director, says: "Building operations which we are now making consist of alterations in some of our old buildings, which were out of date and are now being demolished and rebuilt. This, along with the reorganization of our company, is done in the hope that within the next year or two it will be possible to get sufficient raw materials to run our works to capacity, which has not been the case for some years past."

Coke Plant Expansion

By-Product Coke Plant of Algoma Steel Corporation Now a Most Modern Installation

With additions recently made and improvements contemplated next year, the by-product coke plant of the Algoma Steel Corporation at Sault Ste. Marie is now to be regarded as a thoroughly up-to-date plant. A very complete description of the plant written by its superintendent, Wm. Seymour, appears in the November issue of *Iron and Steel of Canada*. The original installation, consisting of two batteries of Koppers regenerative by-product ovens of 55 ovens each, together with the necessary coal handling and by-product recovery apparatus was completed early in 1911. Soon after the coke plant was started, a sulphuric plant was erected to supply the acid necessary to make sulphate. In 1918 the erection of an additional blast furnace made ex-

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The above is a building recently erected for the Steel Company of Canada at Hamilton, Ontario

tensions necessary to the coke plant and these consisted of 50 Wilputte ovens, increase of coal storage space and an additional primary cooler. One of the original Koppers ovens is now being rebuilt and modernized and the other will be rebuilt next year.

Dougall Varnish Co. Expands

Plant of the Dougall Varnish Co., Limited, at Montreal Will Have Larger Output

The Dougall Varnish Co., Limited, Montreal, who are associated with the Murphy Varnish Co., Newark, N.J., and Chicago, have just completed the erection of an addition to their plant giving increased capacity to the grinding department. They are also arranging for the erection of an additional building for storage and office purposes which will cost from $25,000 to $30,000. The work of construction will not likely be finished until after the beginning of the New Year, and the enlargement will naturally increase the output of the plant and involve the employment of more help.

Tin Plate for Canada

Baldwin's Canadian Corporation will be Producing by Beginning of Next Summer

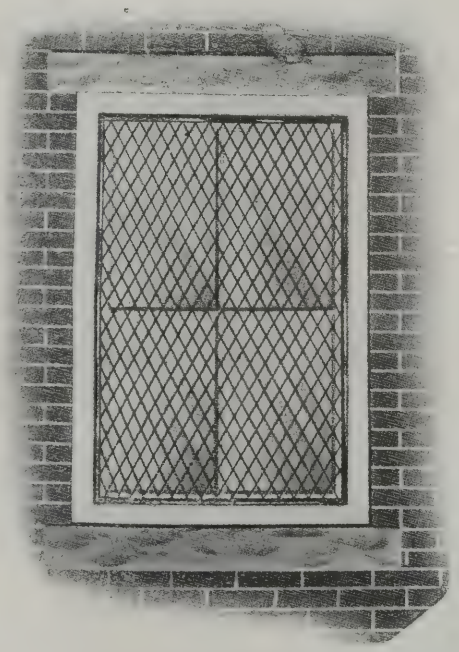
Substantial progress is being made in the construction of the rolling mills being erected by Baldwin's, Limited, the Welsh manufacturers of tin plate and sheets, in Toronto, and the Company expect to be on producing basis by next summer. It will be recalled that the Company took over the big electric steel plant of the British Forgings Co., which was erected in the Harbor Commissioners' industrial section in 1917 by the Imperial Munitions Board. The British Forgings property consisted of 138 acres, with 5,000 feet of dockage and on it was erected a plant equipped with ten six-ton electric furnaces. For the present Baldwins, Limited, will operate on scrap but eventually they may instal furnaces to produce their own iron from ore. The finishing mill now under erection is 800 x 70 feet and will contain eight mills, which will give a production of 200,000 tons of tin plate, sheets, etc., per annum, which will be sufficient to provide for all present Canadian requirements. Hitherto, of course, no tin plate has been manufactured in Canada. Later on the Company will enlarge their operations as the demand for their product increases.

A Busy Pulp Mill

Whalen Company's Mill at Port Alice, B.C., Ships Sixty-five Tons of Pulp a Day

Writing in the *Vancouver Province*, Lukin Johnston gives some interesting first-hand information about the operations of the Whalen Pulp & Paper Co. at Port Alice, B.C There are more than 600 persons employed in and about the plant and in the adjacent logging camps. Already the export reaches 65 tons of pulp a day, packed in 320-pound bales, in addition to large quantities of lumber. Nearly all of it passes through Vancouver on the way to Tacoma and Seattle, to be loaded on Japanese vessels for Japan. The company's sawmill cuts 250,000 feet per day—practically the whole of which comes to Vancouver. In the process of manufacture 350 tons of sulphur are used per month, and 1,000 tons of coal is consumed in a similar period. Stores to the extent of $25,000 a month are purchased in Vancouver to supply the wants of the settlement.

"Snowhite" pulp—the first grade manufactured by the Whalen firm—is said to be as perfect a product of its sort as can be found. In Japan the pulp is manufactured into paper, a process which it is said can be carried out more economically there than here. Plans are being made for ex-



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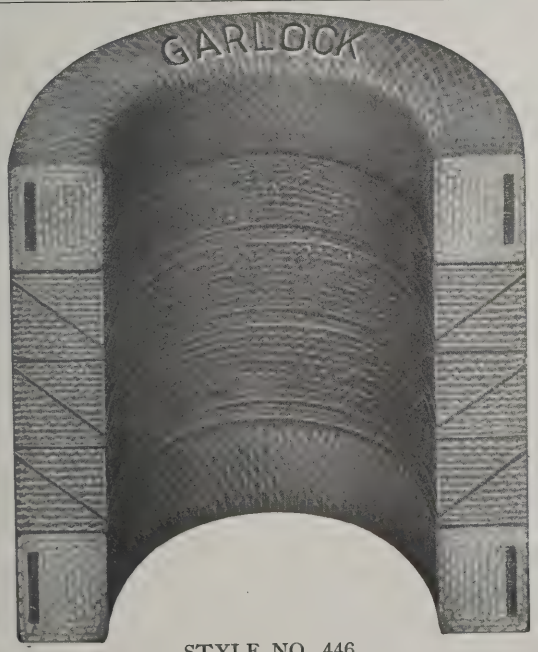
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Winnipeg, Man., Galt Bldg.
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The Canadian Wood Turpentine—made at our mills at LaTuque, P. Q., is an excellent diluent and solvent and contains no free rosin.

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BROWN CORPORATION

Sales Office: *Portland, Maine, U. S. A.*



tensive improvements to the plant. Water-power will be utilized, and a smaller mill will be put into operation, in addition to the present one, to prevent smaller timbers going to waste.

The company's timber limits, containing 2,900,000,000 feet of standing timber, are, so to speak, at its door. The mountains close at hand are being logged off scientifically, and logs from one camp are conveyed to the water by chute within a short distance of the mill. No finer spruce and hemlock exists in the world than that round Quatsino Sound. The townsite includes, besides comfortable quarters for employees, a hospital, poolroom and reading-room, while a moving-picture house is to be installed shortly.

25 Per Cent. More Capacity

Canadian Fertilizer Co., Limited, Chatham, Will Produce About 2,000 tons per Year

Additions which will increase their capacity by about 25 per cent. over present capacity, are being made to their factory by the Canadian Fertilizer Co., Limited, Chatham. An extension 48 feet square is being made to the present main factory building, the cost of building alone being slightly over $3,000. They are also building reinforced concrete storage bins, 60 x 100 feet, with frame and prepared roofing, the cost of which will amount to $5,000 or $6,000. The addition, with the new machinery being installed, will bring the capacity of the plant up to about 2,000 tons per year. Work is being done by the company's own employees, as the season is one of inactivity.

Brantford Industry Grows

Business of Brantford Oven & Rack Co., Limited, is Extending Into Other Lines

Increasing business has made necessary the extension of the plant of the Brantford Oven & Rack Co., Limited. Their main line consists of ovens for bakeries, but they are gradually taking up various kinds of industrial work for factories. They make trucks of all kinds, manufacturing their own castors and, having secured several patents, will increase the number of their products. The addition under erection consists of two storeys and basement. It includes a special assembly room with iron beams, so that they can build any type of low temperature heating oven that is desired. A number of special machines are being installed.

Two Auxiliary Plants

Cluett, Peabody & Co. of Canada, Limited, Are Increasing Their Productive Capacity

In order to take care of certain operations which they are unable, because of scarcity of operators, to handle in their factory at St. Johns, P.Q., Cluett, Peabody & Co., of Canada, Limited, manufacturers of collars, shirts, undersuits and handkerchiefs, have acquired a building in Sherbrooke, P.Q., 30 x 125 feet, four stories, which they hope to get ready for operation as an auxiliary plant this month. In it they expect to be able to employ from 200 to 300 girls.

As indicating the growth of business, the Company have recently opened an auxiliary plant in St. Johns, which is materially increasing their production of collars, while they are endeavoring to secure premises in Montreal which will enable them to increase production of shirts. It is also their intention as soon as necessary to double the size of the Sherbrooke factory.

Reporting on business conditions in their particular lines, F. W. Stewart, Managing Director, says: "The demand for our product is very strong indeed and, generally speaking, the supplies of collars and shirts throughout the country are



Industrial Chemistry

The Beginning of Greater Things

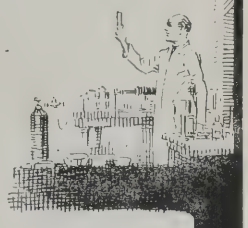
Canadian Industry emerges from the chaos of the war years a veritable young giant challenging the world.

Yet, great as has been our recent progress we are but on the threshold of an era of development and expansion almost inconceivable.

The yard stick of our future ***Industrial*** greatness will be—Chemistry. And our progress will be in keeping with our appreciation and use of this practical science. Germany surpassed the world industrially because she ***understood*** and ***applied*** industrial chemistry in her manufacturing plants.

To bring home to Canadian manufacturers the inseparable relation of Chemistry to Industrial Progress we will publish in this space, each month, a short, practical paragraph or two on Industrial Chemistry. In the interests of your business read and digest these few words.

Do not hesitate to ask us how Chemistry can help YOU. Our commercial laboratories, the largest and best equipped in Canada, are organized to serve you.



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WIRE, CORDS AND CABLES
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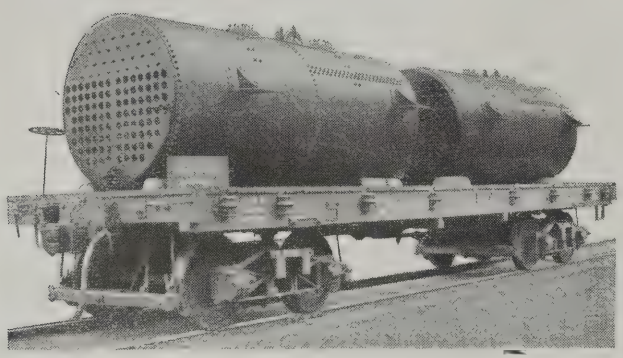
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Beams, Column Sections, Angles, Tees, Plates, Bars, Checkered Floor Plates, etc.

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very low. We have recently withdrawn our salesmen from their territories, as our present production is sold up for many months to come, and it is only by securing the additional factories mentioned that we can hope to catch up on the demand for our goods within the next year or two If this demand should continue, which would appear to be very likely, it will be impossible for us to increase our production to a sufficient extent to take care of the demand within the time mentioned."

From Munitions to Tractors

Cluff Ammunition Company Organization Converted Into Tractor Manufacturing Industry

It was one of the problems of the reconstruction period to know what to do with the various munition-making industries which had sprung up here and there throughout Canada. In the case of the Cluff Ammunition Co., the difficulty has been solved by substituting the manufacture of tractors. A company known as the Chase Tractors Corporation was formed and this Company purchased outright the world's manufacturing rights and trademark of the Chase Motor Truck Co. of Syracuse, N.Y., makers of the Chase Tractor. The plant of the Cluff Ammunition Co. has been rearranged to meet the new conditions and the task of reconstruction has now been practically completed. By this arrangement the organization, plant and equipment of the Cluff Ammunition Co. have been conserved for the uses of Canadian industry. Back of the new corporation are Messrs. R. J. and W. J. Cluff, J. W. Norcross, R. M. Wolvin, and James Whalen, all of whom were interested in the munition company.

The Chase Tractor represents nine years of engineering study and practical experience in tractor building. It is a low-riding machine, which can be used under trees in orchards, on hillside work and on rough ground. It has no differential gears—that is, it gets equal driving power on both rear wheels, giving it great power on hilly ground and for overcoming side-draft.

F. R. Bartlett, General Manager, states that from every standpoint business looks very encouraging, both domestic and foreign. The Company are covering Canada pretty thoroughly and have opened a branch in Syracuse, N.Y., to look after American trade. Early in December they will send a representative to London, England, to spend three or four months investigating the whole question of export.

Before the end of the year the Company propose to start the assembling of a motor truck and will therefore turn out both trucks and tractors from the Toronto factory.

The Fish Packing Industry

How Plants on the West Coast of Vancouver Island are Increasing Operations

Information as to the operations of the fish-packing companies on the west coast of Vancouver Island is contained in a contribution to the *Vancouver Province* by Lukin Johnston. Mr. Johnston says that the waters of the west coast probably are more prolific of fish life than those of any portion of Canada or the United States. The products of the coast vary from the mammoth 80-foot sulphur-bottom whale to the tiny pilchard, not much larger than a sardine. Then there are salmon, halibut and herring, and in addition sea lions and several other varieties of whale.

The sockeye does not occupy a conspicuous place in the west coast salmon catch. Springs and cohoes are caught in large numbers, but in chums the west coast leads all other districts. This year, despite the unusual fact that lack of moisture has handicapped some canneries, the pack of

ALCOHOL



Plant of Canadian Industrial Alcohol Company Limited, Corbyville, Ont.

With a capacity of 450,000 (proof) gallons per month we are the largest producers of Alcohol in Canada.

Manufacturers of vinegar, perfumes, essences, pharmaceutical preparations, etc., are invited to write us for prices of Alcohol suitable for their particular line of business.

We make a special feature of contracting for the requirements of manufacturers for the year or season, thus providing not only a uniform cost but also a steady supply as needed.

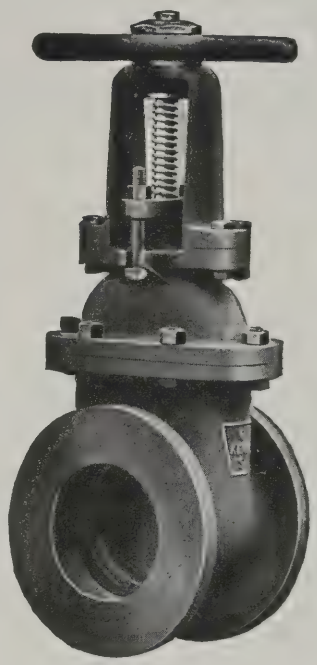
Those who are using Duty Paid Alcohol in their manufacturing processes would do well to consult us with a view to using it "In Bond," thus avoiding the use of two-year-old Alcohol. Under the rules and regulations of the Department of Inland Revenue, newly made Alcohol may be used "In Bond." This Alcohol is much cheaper than two-year-old.

METHYLATED SPIRITS or Denatured Alcohol is sold only by the Department of Inland Revenue, Ottawa, Ont., but any other kind of Alcohol may be secured from us.

CANADIAN INDUSTRIAL ALCOHOL COMPANY LIMITED

MONTREAL, QUE.

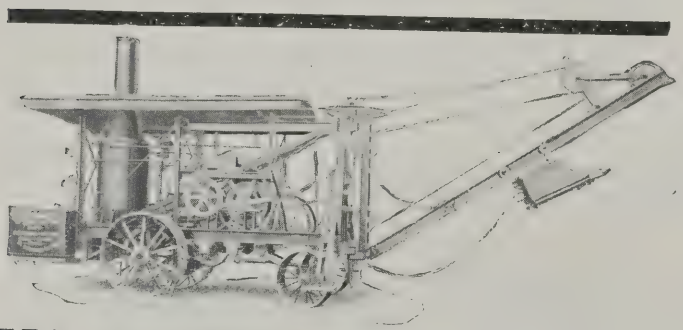
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Travels under its own power. Weighs 12 tons. Splendid range of work. For street and road work, ditch digging, cellar digging, loading and unloading, etc., it has no equal. Made complete in Canada. Deliveries from stock.

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Engineering & Machine Works of Canada, Limited

St. Catharines Ont.

Eastern Sales Office : Hall Machinery Co., Sherbrooke, Que.

chums will run well up to 250,000 cases. It is late in the season now (Oct. 24), but the fish still are being caught in abundance and are in good condition. One day last week at the Nootka cannery there were landed 18,000 fish—the finished cans passing along at the rate of eighteen a minute all day long.

The output of this plant approximates 70,000 cases a year. Wallace's cannery at Kildonan, on Barkley Sound, put out nearly 100,000 cases last year, but this year, owing to the unwonted dryness of the season, the output will be considerably handicapped So dry has the summer been that insufficient water has been obtainable from the mountain springs to run the boilers of the Kildonan plant to capacity, while, for the same reason, it has been necessary to close down the cold storage plant. It is estimated that this cannery, one of the largest on the west coast, will not pack more than 30,000 cases of salmon this season.

Large additions are almost completed to the plant of Gosse-Millerd at San Mateo Bay, making this one of the biggest canneries on the coast. Grappier Creek cannery, run by returned men, Clayoquot and Quatsino canneries all are having a successful season and just now are hives of industry.

Pilchard has been exported by several canneries during the last two years. The Nootka Packing Company has sold in that time about 100,000 cases. This year so far the company has put up 60,000 cases of this fish.

The herring salting plant of Butterfield and Mackie at Ecoole, on Barkley Sound, is being made ready for the season's work. Last year the company shipped to New York 2,000 tons of herring, more than 14,000 barrels. This plant has been in operation four seasons. Both Newfoundland and Alaska now compete for this trade, but despite the handicap of freight rates, the local products finds a ready sale.

New Steel Products

Algoma Steel Corporation Meets with Success in Manufacture of Alloy Steel

Two important developments in the steel industry are to be recorded this month. One concerns the manufacture of alloy steel, which has been successfully tried out by the Algoma Steel Corporation, the other the rolling of structural shapes up to 15 inches by the same company. The alloy steel has already been used with satisfactory results by Canadian automobile manufacturers and, as this material has hitherto been imported from the United States, a substantial market is opening up for the product. In the matter of structural shapes, these are being rolled in a section of the rail mill equipped for the purpose. The new structural steel mill, which was proposed some time ago, has not yet been erected, but the company hope that an early announcement will be possible regarding its construction. The company have recently booked several good orders for rails and have business on hand to last six months.

West Coast Whales

Various By-Products are Taken from Mammals Caught Off British Columbia Coast

Writing in the *Vancouver Province* under date of October 24, Lukin Johnston tells of the operation of the Kyuquot Whaling Company on Vancouver Island. Up to date, he reports, the station at Kyuquot had handled 157 whales. Two schooners are kept employed, while about seventy-five hands are kept busy at the station.

Four principal varieties of whale are caught—sei, sperm, sulphur bottom (the largest variety), and the humpback, the only really native whale. They run from sixty to ninety feet in length and average one ton in weight to each foot of

SALE OF MILITARY STORES, ETC.

DRY GOODS, HOSPITAL FURNITURE, BEDDING, HARDWARE, LEATHER GOODS, JUNK, ETC.

SALES WILL BE MADE BY SEALED TENDER

Persons desiring to tender are requested to register their names and addresses with the **SECRETARY OF THE WAR PURCHASING COMMISSION, BOOTH BUILDING, OTTAWA,** stating the class of goods in which they are interested, whether new or second-hand or both.

Tender forms with full details of the goods and places at which samples may be seen, will be mailed when ready to those who have registered as requested above.

Special Terms to Hospitals, Etc.

Dominion, Provincial, and Municipal departments, hospitals, charitable, philanthropic, and similar institutions which are conducted for the benefit of the public and not for profit may purchase goods without tender at prices established by the War Purchasing Commission.

Returned Soldiers and Sailors and Widows and Dependents of Soldiers and Sailors killed in the War may obtain supplies, for their own personal use and not for re-sale, through the nearest branch of the Great War Veterans Association who will combine individual orders and forward to the War Purchasing Commission through the Dominion Command of the Great War Veterans Association. These services are rendered by the Great War Veterans Association to all parties in the classes named, whether members of the Great War Veterans Association or not.

All communications should be addressed to the Secretary, War Purchasing Commission, Booth Building, Ottawa, who will be glad to supply lists and further details to those interested.

John V. Gray Construction Co., Limited

General Contractors for Buildings

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SMALL GREY IRON CASTINGS

BY SPECIAL PROCESS

Giving a Smooth, High-grade Casting for Enameling and Nickel Plating

Rubber Manufacturer's Equipment, Cast and Machined

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PRODUCTS
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Wire straightened and cut to lengths
WIRE Barrel Hoops, also Brainard Flat Steel Barrel Hoops with Beaded Edge
FINE WIRE, Liquor Bright, Tinned, Coppered or Galvanized

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Incorporated
MONTREAL - CANADA

length. From the blubber of an average whale more than 100 barrels of oil are produced and shipped to soap factories. The bones are treated and sent to corset and comb factories to be manufactured. Part of the meat is canned for food and from the rest of the meat fertilizer is produced. Only the meat of the younger whales is considered fit for food, and in appearance and taste it resembles beef. Thirty thousand cases of whale meat were shipped from the Kyuquot station last year.

Linen Industry Extends

Flax Spinners, Limited, at Guelph Add a Threshing and Cleaning Mill to their Plant

Through the recent completion of a threshing and cleaning mill, Dominion Linens, Limited, Guelph, are in a position to carry through the entire process of manufacturing linens from the growing of flax to the making of the finished article. The mill is a structure 40 x 100 feet and is operated in connection with the Flax Spinners, Limited, organization which looks after all the processes up to the spinning of the thread. The Company are now able to grow their own fibre, produce their own seed for re-seeding purposes and put the flax through all the different processes up to the finished linen. The inclusion of the threshing and cleaning mill will enable them to grade their material for the different classes of work they have in hand and they expect it will mean further extensions in their business.

General Phonograph in Canada

Have Recently Acquired and Are Now Operating a Plant Located in Kitchener

A recent development in the musical instrument industry is the entrance of the General Phonograph Corporation of New York into Canada. They have acquired the plant, at Kitchener, of the Pollock Manufacturing Co. and are now operating it under the name of the General Phonograph Corporation of Canada, Limited. Phonograph motors, tone arms, sound boxes and phonograph accessories are being made both for domestic and export trade, and in order to handle the growing business in these lines an addition is being built, which will bring the floor space up to 41,500 square feet. The Pollock Mfg. Co. were manufacturing motors, etc. for the past twelve years, except during the war period when the factory was devoted to the making of war material. The head office of the General Phonograph Corporation of Canada is at 172 John St., Toronto. Mr. C. J. Pott is Canadian manager, in charge of all the sales for Canada, and Mr. A. B. Pollock is in charge of the Kitchener plant, assisted by Mr. Welker, chief engineer.

Buy Out Little Current Mills

C. Beck Mfg. Co., Limited, Penetanguishene, Take Over Mills and Limits of Little Current Lumber Co.

The C. Beck Mfg. Co., Limited, manufacturers of lumber and bill stuffs, lath, shingles, etc., Pentanguishene, Ont., have taken over the plant of the Little Current Lumber Co., Little Current, Ont., which includes their mills and limits. The capacity of the lumber mill is 140,000 feet in 20 hours with the mill operated night and day. The plant was formerly owned by W. & A. McArthur, Cheboygan, Mich., and was later taken over by George T. Jackson and associates. The number of men employed is from 150 to 200. The C. Beck Mfg. Co. have no intention of enlarging any of their plants, as there is more sawmill capacity on the Georgian Bay now than there is timber to supply them.

"MORROW'S"

Twist Drills made from Sheffield (England) steel, and specially tempered—the lasting kind—***MORE HOLES, WITH LESS RE-GRINDING.*** The kind for ***YOU***—unconditionally guaranteed.

"MORROW'S"

SET and CAP SCREWS, ENGINE STUDS, SEMI-FINISHED NUTS.—The reliable kind you have used for years.

Insist on MORROW'S and get maximum service

INGERSOLL - - CANADA

P/H and Imperial Brand Files—all Canadian Made

"THEY CUT FASTER AND WEAR LONGER."



It's Always Ready

Eddy's Indurated Fibreware Fire Pail

Every Eddy Fire Pail has a rounded bottom that necessitates its being hung on a rack or hook. Therefore, in the event of a hurried call the Eddy Fire Pail is always sure to be in its proper place—in the rack or on the hanger.

And it won't shrink, bulge or fall apart. Every pail is moulded, pressed and baked in one piece until it is as hard as granite.

Ask any hardware dealer to show you the Eddy Fire Pail.

Another good fire preventative—Eddy's "Silent Five" Matches. No sparks when struck. No afterglow when extinguished.



The E. B. Eddy Co., Limited

Hull - Canada

ESTABLISHED 1850

DID YOU EVER NOTICE

that jarring, grinding noise in your machine shop caused by the metal gears?

Wouldn't you like to stop that noise? You can do it by using

NEW PROCESS GEARS
RAWHIDE PINIONS

They last indefinitely too

Ask us about it?

R. GARDNER & SON, LIMITED
Nazareth, Brennan and Dalhousie Streets
MONTREAL

MALLEABLE IRON
CASTINGS

HIGH TENSILE STRENGTH

GALT MALLEABLE IRON CO.
LIMITED
GALT ONTARIO

Now Making Steel Tanks

St. Lawrence Welding Co., Limited, Enlarge Their Plant to Undertake New Line of Manufacture

The St. Lawrence Welding Co., Limited, of Montreal, have started the manufacture of welded and rivetted steel tanks and to secure space for the new industry have secured 10,000 square feet of floor space immediately behind their present works. By cutting doorways through the wall separating the two premises they have been able to bring the whole plant under the supervision of the one office. It is their intention to manufacture tanks of any size or capacity, and their plant is fully equipped with punches, shears, rolls and the necessary equipment to work up to half-inch plate. The company state that they have been practically forced to go into this business on account of the repeated demands and inquiries for both welded and rivetted tanks. They have secured a lot of new business and their new venture is well on the way towards proving very successful.

New Factory for Files

Kerr File & Tool Co., Limited, Are Putting Up a New Plant at West Toronto

The Kerr File & Tool Co., Limited, who have succeeded the old-established Kerr Bros. File Works, Toronto, are erecting a new factory at the corner of Fisher Street and Dundas Street West, where they will undertake the manufacture of files on a large scale. They hope to get started by the new year and for the first few months will concentrate on the production of files only. Later on they expect to extend their industry to include other products. In the meantime they are continuing operations at their old factory at 63 Nelson Street, where they installed additional equipment to increase their output of files. The new property is about 400 x 100 feet and two shops are being erected, one for forging and grinding and the other for cutting and hardening.

Doubling Their Capacity

Perfect Machine Co., Limited, Galt, Must Enlarge to Take Care of Increasing Business

With orders coming in faster than they could handle them, the Perfect Machine Co., Limited, Galt, have found it necessary to more than double the capacity of their moulding shop, while they contemplate the building of an erecting shop, 40 x 132 feet. The business was started in May, 1913, with two men, which comprised the entire staff for the first half-year. After that the staff has grown steadily until now the company have over fifty employees. During the past year they have gone into the manufacture of grey iron and semi-steel castings for the jobbing trade and are meeting with a splendid response. They have also formed a nice connection in Great Britain and are in touch with firms in Central America, France and Switzerland.

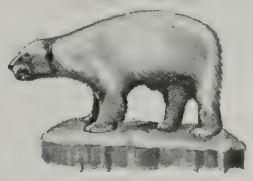
Valve Factory for Belleville

H. A. Wood Manufacturing Company, Toronto, are Taking Over Building in Belleville

Arrangements were completed at the first of the month whereby the H. A. Wood Manufacturing Co., of Toronto, who have been operating a small plant on Pearl Street, Toronto, for a short time past, secured possession of a three-storey building on Pinnacle Street, Belleville, formerly used as a cannery but lately as a barracks. The company are putting in a plant for the manufacture of automobile valves and other valves for high pressure work, and about 300 men will be employed. Those interested in the industry include Dr. I. G. Bogart, Kingston; Henry Hangrove, Kingston; S. W.



XXX GENUINE ARCTIC METAL



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The Best Babbitt Manufactured

FOR

Bearings that carry extraordinary heavy loads

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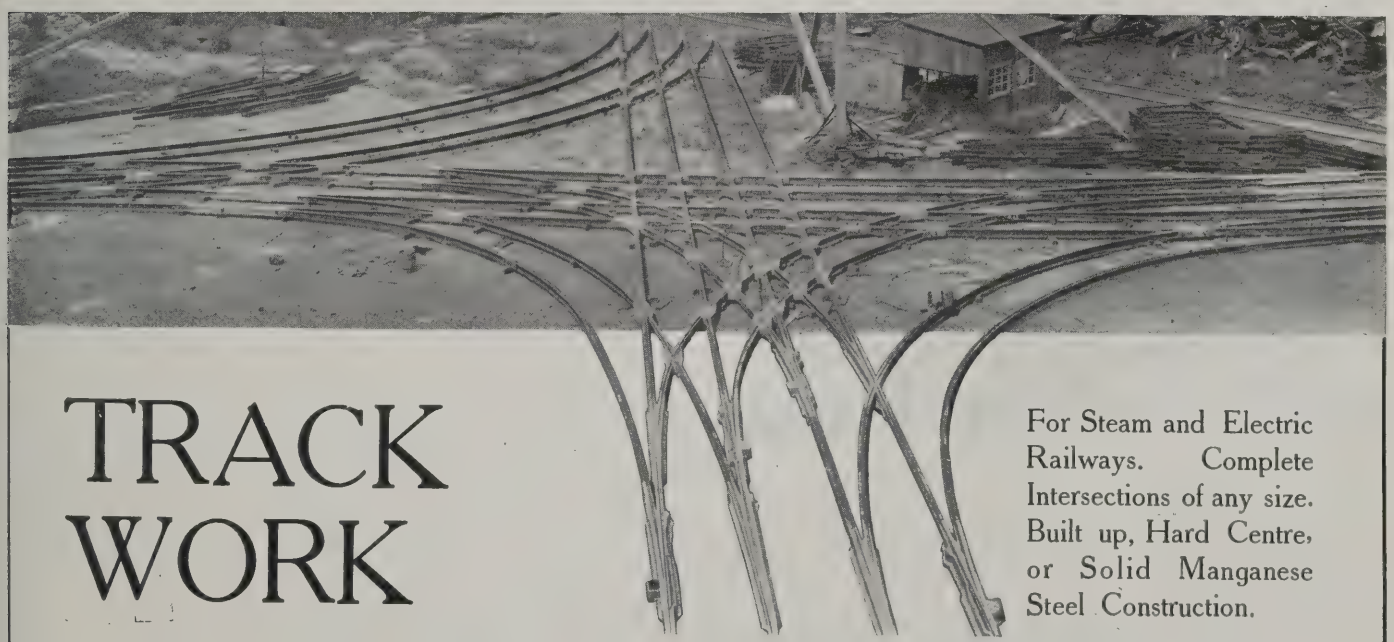
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TRACK WORK

For Steam and Electric Railways. Complete Intersections of any size. Built up, Hard Centre, or Solid Manganese Steel Construction.

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PUT YOUR PROBLEM UP TO US



We are specialists in building locomotives. We build all types and sizes, also all kinds of repair parts for locomotives and tenders.

Our experience puts us in a position to give you expert advice as to what particular type and size of locomotive is best suited to your needs.

Put your locomotive problem up to us.

MONTREAL LOCOMOTIVE WORKS, LIMITED
DOMINION EXPRESS BUILDING MONTREAL, CANADA

Jenckes, Sherbrooke; James R. Ness, Toronto; M. G. Hunt, Toronto; L. Denys, Toronto, and R. J. Graham, Belleville. It is a subsidiary of the Wood Airtight Valve Company, Limited, Canadian rights on whose patents are held. The latter company are also arranging to establish a subsidiary industry in the United States.

A 50 Per Cent. Increase

Brantford Roofing Co., Limited, Make Additions and Improvements to Their Plant

Fifty per cent. more capacity will be secured from the plant of the Brantford Roofing Co., Limited, when extensions now under way are completed next March. These additions and improvements, which are costing between $40,000 and $50,000, will include new coating tank still house, double the capacity of the present equipment, additional new boiler, new grit storage bin and additional equipment and machinery. Roofs on all buildings are being raised to make plant uniform and fireproof. Contracts have all been let and the work is being rushed as rapidly as possible. The company are making the enlargement in anticipation of a big boom in building next year, when they anticipate that there will be a considerable scarcity of roofing, as well as of the raw material used in its manufacture.

Going Up Ten Storeys

Northern Aluminum Company are Erecting Big Building in Connection with their Toronto Plant

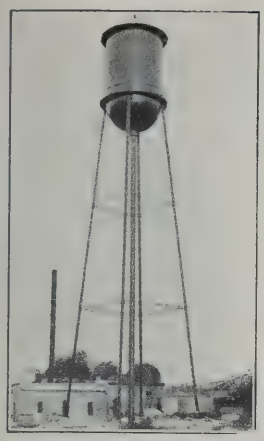
A building ten storeys high of reinforced concrete construction is being erected by the Northern Aluminum Company, Limited, at their works on Sterling Road, Toronto. It is intended for light manufacturing and warehousing purposes. By removing some of the lighter processes from the present plant, more space will be provided for heavy manufacturing, and output will be correspondingly increased. The work of construction is well under way, but it is impossible to tell when the building will be ready for occupancy. The company hope, however, to be using the building some time next spring. The structure is 151 x 64 feet, ten storeys and basement, and the cost is estimated at $358,000.

Protecting Their Forests

Abitibi Power & Paper Co., Limited, Take Steps to Safeguard Their Supply of Wood

It is most gratifying to note that another of Canada's great paper manufacturing companies are taking steps to conserve the forest wealth of the country. The Abitibi Power & Paper Co., Limited, have recently established a Forestry Department, which has already started to work along the lines of nursery, engineering, protection and investigation. The best available site has been selected for a nursery at a point adjacent to Twin Falls, and here ten acres of land have been cleared and prepared ready for operations in the spring. It is proposed to clear and prepare a similar ten acres annually until a maximum of fifty acres is reached, and here will be developed the source of supply for the reforestation branch. The nursery will be placed on such a basis as to give an annual yield of from one to two million four-year-old trees, but as the first stock grown from seed will not be available until the springs of 1922 and 1923, it will be necessary to purchase plantable stock in the meantime.

The location of planting sites, together with detailed data on the exposure, slope, soil, ground cover, percentage of natural reproduction and of species present, drainage, character and amount of timber standing, presence of disease and insects, amount of rainfall and snowfall, fire hazard,



CANADIAN CHICAGO BRIDGE AND IRON COMPANY
Limited
Bridgeburg, Ontario
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etc., will be determined by the Engineering Branch through an intensive reconnaissance of the limit.

Another branch of the department will be devoted to fire protection. This branch will endeavor to effect the solution to the greatest degree possible of the existing fire hazard problems. Still another branch will devote its energies towards the minimizing of the damages wrought by insects and fungi. Through the silviculture branch will be introduced to a fuller extent the more desirable forest species to the exclusion of the less desirable. This branch will protect valuable watersheds and develop a cutting system which will better the quality of timber, increase its rate of growth, assist and hasten reproduction, reduce windfall to a minimum and produce a maximum final yield by creating the best possible growing conditions.

The Abitibi Company's forestry department is in charge of Mr. H. E. Schanche, Jr., a graduate in forestry of the Pennsylvania State College. He spent some years in forestry work in Quebec prior to the war, served as a lieutenant in the U.S. Air Service, and has now returned to his former line of work.

Additions to Bridgeburg Plant

Pratt & Lambert, Inc., "Varnish Makers 70 Years," to Treble Present Manufacturing Facilities

Extensions which will treble the manufacturing capacity of their present plant in Bridgeburg, Ont., are being made by Pratt & Lambert, Inc., manufacturers of varnish, whose business is now world-wide in extent. The extensions consist of a four-story brick building for the manufacture of enamels, stains and fillers, and similar products; new chimneys, double the size of the old; thinning buildings, filter buildings, and other equipment. These additions are now rapidly nearing completion. Their erection demonstrates how quickly the business has grown, since when the original plant was erected in 1910 it was one of the largest and most up-to-date in Canada.

Added to Woolen Plant

The T. H. Taylor Co., Limited, of Chatham, Have Been Spending Money on Plant Extension

During the past two months the T. H. Taylor Co., Limited, of Chatham, who operate both the Beaver & Daisy Flour Mills and the Chatham Woolen Mills, have been making additions to their scouring plant and installing a large Sargeant wool drier. To accommodate the enlarged plant another storey has been added to the scouring and wool-drying rooms. Altogether some $25,000 or $26,000 have been expended on the additions, which have been necessitated by increased business. The company, who manufacture ladies' friezes, homespuns, blanket cloths, mackinaws, flannels, tweeds, etc., find trade very good just now and their output is sold up for eight months.

Increased Facilities

J. M. Loose and Sons, Limited, Toronto Have a New and Larger Factory Under Erection

A new factory is at present under construction by J. M. Loose & Sons, Limited, Toronto, manufacturers of piano actions and keys. They are at present located at 349 Carlaw Ave. while the new plant is going up at 239-261 Sorauren Ave. It is a brick building of mill construction, 120 x 55 feet, four storeys high, with boiler-house and drying kilns. The new factory is larger than the premises occupied at the present and will give increased and better facilities, which are much needed.



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Make Gasoline Engines

Fisher-Wilkie, Limited, Are Making Large Addition to Their Plant at Sandwich, Ont

An addition 50 x 200 feet, in which they will manufacture gasoline engines, is being made to the plant at Sandwich, Ont., of the Fisher-Wilkie, Limited. They are also building a power plant, 40 x 58 feet, which will be completed by January 1. When these additions are finished, they will have a total of 22,000 square feet. The company some months ago took over the factory of the Bishop Fur Co. and have since been getting it in shape. They started production on December 1.

Increasing Output 100 per Cent.

Jenkins Bros., Limited, Adding to Their Valve Manufacturing Plant in Montreal

Through additions now being made to their plant in Montreal, Jenkins Bros., Limited, manufacturers of valves, packing and rubber specialties, anticipate being in a position to increase their output of valves by about 100 per cent. At the present time they are erecting a new machine shop. This is a building, 80 x 192 feet, one storey high, of steel and brick construction, with crane way and monitor. It is costing approximately $40,000 and will probably be completed about the middle of January. The Company had previously extended their present foundry building and built a new core room, and the additions combined will give them the increased capacity.

Branch at Woodstock

De Long Hook and Eye Co. of Canada, Limited, Have Started Manufacturing in Woodstock

A plant for the manufacture of corset and brassiere tape has been located in Woodstock by the De Long Hook & Eye Co. of Canada, Limited, of St. Marys, Ontario. They have leased a flat on Finkle Street and have installed fourteen machines. About twenty hands are being employed at the outset, and operations commenced at the first of the present month. For the present the undertaking is largely of an experimental nature. The company will not remove from St. Marys and the Woodstock plant will be directed from there.

Peterboro's New Industry

Something About the Nashua Gummed & Coated Paper Co. and its Various Products

Supplementing information appearing in the November issue regarding the establishment in Peterboro of a branch plant of the Nashua Gummed & Coated Paper Co., Nashua, N.H., it might be stated that this concern is one of the largest and strongest companies in the United States in the fields of waxed, gummed, glazed and fancy papers. The company employ about 800 hands in their three mills, two at Nashua and one at Middletown, Ohio. They were formerly a manufacturing department of Carter, Rice & Company, Boston, one of the oldest and largest paper jobbing houses in New England, but for the past several years have operated as a completely separate and independent company. Through their president, Mr. James Richard Carter, the Nashua Company control the Sevigne Wrapping Machine, which is a most successful and widely used bread wrapping apparatus, a situation which assures to bakers a supply of papers especially prepared for machine wrapping, together with the best of service.

The Canadian branch will be backed by the full resources of the parent company, and is prepared to take fullest possible advantages of domestic and foreign trade opportunities.

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Mixed Acid	Phosphate Soda	Caustic Soda	Tin Crystals

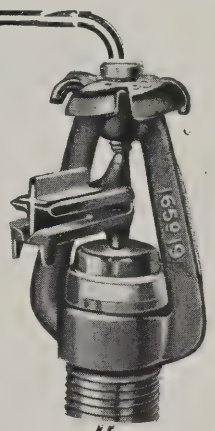
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Railway and Highway Truss, Girder and Beam Spans of all types.



THE MARITIME BRIDGE COMPANY, LIMITED - New Glasgow, Nova Scotia

The officers of the Nashua Gummed & Coated Paper Company are James Richard Carter, president; Winthrop L. Carter, treasurer; Geo. H. Lowe, secretary. The Canadian business will be managed by Robert A. Brown, who has for some time been identified with the Nashua factories in an executive capacity.

Gummed papers fill a variety of demands. The non-curling grades are used in the manufacture of printed labels, stamps, seals, etc., while heavier, stronger grades are prepared for staying the corners of paper boxes and cartons. Narrow strips of gummed paper, known as binding tapes, are quite generally replacing string in securing small packages and in sealing fibre cartons. Various grades of gummed cloth are used widely in book-binding, in the manufacture of writing tablets, and in the reinforcement of fibre shipping cases. Cloth-lined papers find use where unusual strength is required, as in envelopes, maps, and numerous novelties. Waxed papers are used in increasing volume for wrapping food products, such as meat, bread, butter, candies, and cereals. They are also used largely by manufacturers of tobacco, soap, rubber goods, and small metal parts.

Will Make Parchment Paper

Specialty Paper Mills, Limited, Have Plans for Mill at Camden East, Ont.

A new corporation, known as Specialty Paper Mills, Limited, with American capital behind it, has been formed recently to take over the paper mill at Camden East, Ont. The company, which has a Canadian charter, is capitalized at $325,000. Its president is L. F. Houpt, President of the George Irish Paper Co., Buffalo. Pending arrangements for completing the plant as originally laid out, the company may make a limited quantity of newsprint, but it is intended ultimately to manufacture full vegetable parchment and high-grade specialties, particularly lines that are not now made in Canada. The mill has been operated recently by the Camden Paper Mills Co., a subsidiary of the Bathurst Lumber Co., the product being kraft and wrapping paper.

Additional Floor Space

Fredericton Company Building Annex to Give 20,000 Feet More of Floor Space

The John Palmer Co., Limited, Fredericton, N.B., are building an annex to their plant to accommodate increasing business in their different lines, particularly summer packs and plow shoes. This company have been manufacturing shoe-packs, moccasins and larrigans for fall and winter use since 1877. Within the last few years they have introduced a moccasin boot or shoe made from oil-tanned leather, with sole leather sole and heel, as a work shoe for farmers, ranchers, woodsmen, trackmen, laborers and all others who need a strong, easy-fitting footwear. The leather used in the manufacture of this boot, as well as all their products, is tanned by a special process in their own tannery. During the last few seasons, trade in this line has developed considerably and more space has been found necessary to handle it.

Erect Big Warehouse

Plymouth Cordage Co. Are Building Five Storey Warehouse at Fort William, Ont.

A warehouse capable of storing around fifteen million pounds of binder twine and rope is at present under erection by the Plymouth Cordage Co. at Fort William. This company, whose Canadian factory is located at Welland, are immense producers of binder twine for use throughout

Increases Power— Saves Fuel

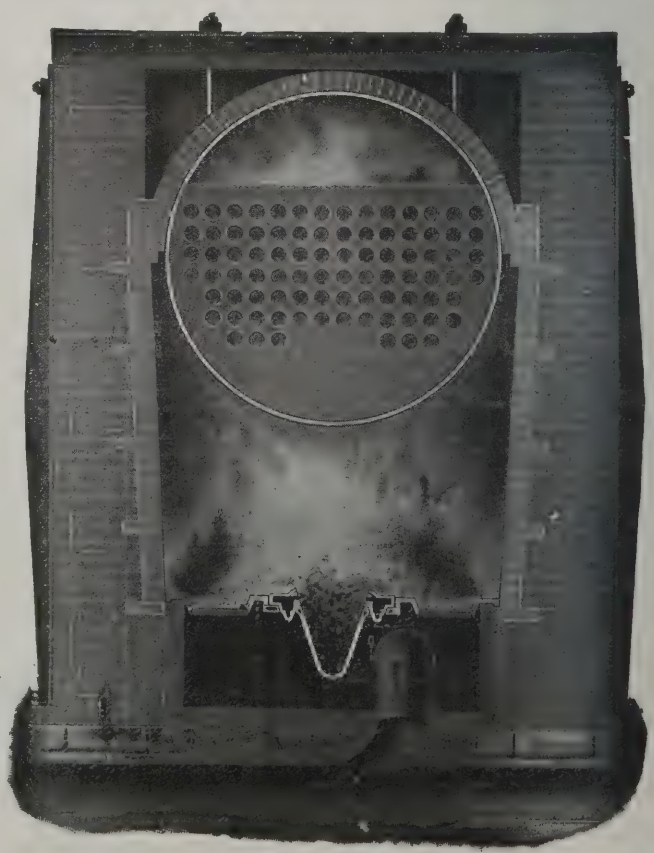
Ordinary methods of firing a boiler are a long way behind the times because it is now well-known that the underfeeding principle gets a far greater amount of heat from the fuel. This principle was pioneered and developed commercially by the

JONES Underfeed Stoker

Savings in fuel cost, varying between 15 and 25 per cent. are everyday accomplishments of the Jones Underfeed Stoker with any grade of coal from dust to run of mine.

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Also Toys, Novelties, Tags and Advertising Signs

Well packed is half sold
Make your containers advertise you

Office and Works :
145 Spadina Avenue

Canada, and the location of their warehouse at the head of the Great Lakes is presumably to facilitate the distribution of their product to the farmers of Western Canada. The building is of reinforced concrete construction, 200 feet long, 100 feet wide and five storeys high. It will be electrically equipped throughout with all the most up-to-date apparatus to be installed that will permit of the most efficient handling of the traffic. Located right on the Kam River, direct deliveries from ships and to trains is possible. It is hoped that the building will be completed and ready for use shortly after the opening of navigation in the spring of next year.

Secure Larger Premises

Greb Shoe Co., Limited, Kitchener Are Transferring Plant to a Larger Building

The plant and factory site of the Gourlay-Fogelberg Shoe Co., Kitchener, have been purchased by the Greb Shoe Co., Limited, of the same place, and moving operations are now going on. The building is practically new, 56 x 100 feet, of red brick, three storeys and basement and has been built with a view to extension. There are 3½ acres of land adjoining it. As the floor space in this building is considerably greater than is the company's present plant, and as the demand for their product is continually increasing, they are naturally preparing for a much larger output, and in addition will venture into such new lines as men's welts and women's and misses' McKay sewed shoes. Up to the present they have specialized in men's and boys' working shoes only. New machinery to take care of the expansion has already been ordered and the United Shoe Machine Co. have been instructed to equip the plant for an output of 1,000 pairs per day.

Make Dyes at Trenton

Mineral Dye Products, Limited, Expect to be Producing by First of the Year

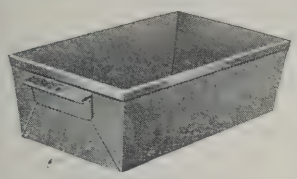
Under the name of the Mineral Dye Products, Limited. a company will shortly be producing mineral dyes at Trenton, Ont. The company have taken over under special exemption arrangements from the town, a building formerly used for cold storage, and are installing an up-to-date plant. They will secure their ore from a property near the Rideau Canal, eighteen miles from Gananoque, and this will be conveyed in barges from the mines to Trenton. It is stated to be high-grade material and the only ore of its kind in North America. The company have been making experiments for over a year and have the necessary formulæ and secret process for making high grade mineral dyes for woollens, serges, tweeds, silks, etc., as well as for use in the paper industry. They expect also to manufacture paints, though this will not be their main product. It is hoped that production will commence about the new year. Ample capital is available and there is said to be no limit to the market for the product.

New Knitting Company

Lennoxville Knitting Mills, Limited, Start Operations in Lennoxville, Que.

The plant of Johnson & Shardlow, Limited, Lennoxville, Que., has recently been taken over by a new company, called the Lennoxville Knitting Mills, Limited, who are continuing the business at the same premises, utilizing the buildings and plant as they were before. The company manufacture worsted and mercerized hose and half-hose. At the present moment no decision has been reached as to possible enlargement. About 35 hands are employed. The President of the Company is Mr. H. V. Haight, a civil engineer connected with the Canadian Ingersoll Rand Co.; Mr. H. L. Allen, the

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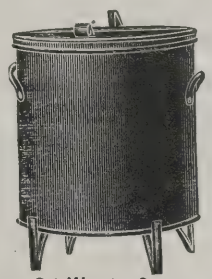


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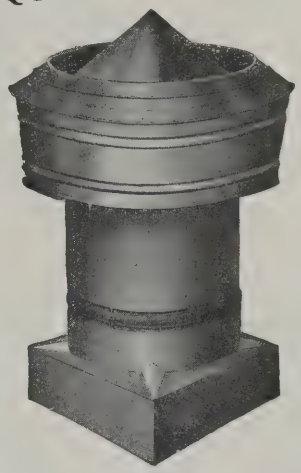
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your work-rooms with "Halitus" Ventilators —provide your employees with the Pure Air that is just as essential to efficiency as pure food and water.

"Halitus" Ventilators are not expensive, are highly efficient, no down-draft, any style base, easily installed by local labor.

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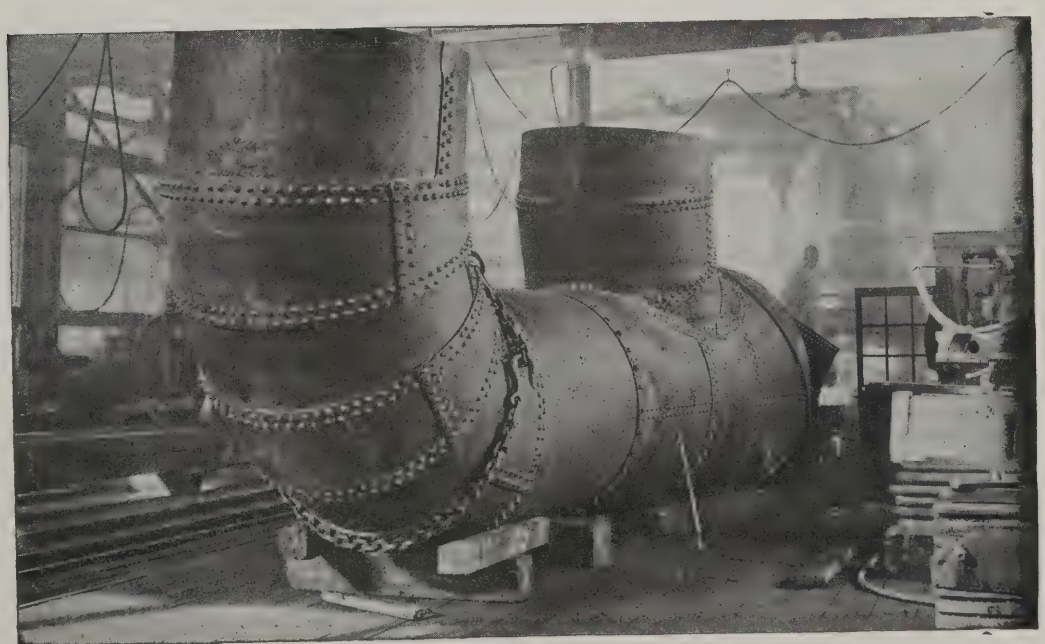
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LARGE STOCK OF STRUCTURAL MATERIAL AT ALL PLANTS



Vice-President, is a jewellery manufacturer in Lennoxville, head of Peerless Jewellery, Limited; the Treasurer is Mr. N. D. Cascadden, wholesale fruit merchant, and Mr. P. G. Newbold, Secretary and Manager, was recently Superintendent of knitting with the Paton Mfg. Co., Sherbrooke.

An extension is being made to the tannery of H. B. Johnston & Co., 774 Dundas St. East, Toronto.

The capacity of the plant of A. J. Reach Company, sporting goods manufacturers, Brantford, is being doubled.

The Montreal Cloak & Suit Mfg. Co., Inc., are opening up a knitting plant under the name of the Fainer Knitting Mills.

The Dunlop Tire & Rubber Goods Co., Limited, Toronto, have a building programme under way which will involve an investment of $250,000.

The Taylor-Forbes Co., Limited, Guelph, are building a new furnace in the core room of their hardware plant and adding an extension, 70 x 100 feet to their hardware foundry.

The Jansen Mfg. Co., Detroit, have purchased the Dale Machine Shop, Walkerville, and will manufacture binding grips for auto upholstery. The plant has about 4,000 square feet of space.

Federal Cement Co. have incorporated to acquire plants at Owen Sound formerly operated by the Union Cement Co. and Imperial Cement Co. These will be remodelled to capacity of 2,000 barrels daily.

The Bon Marche Manufacturing Co. are a new company who have established a small whitewear industry in the old Knights of Pythias Hall, Peterborough, employing from 15 to 20 hands. Prospects are good.

The Provincial Lime Co., Limited, whose plant near Brockville, N.B., was destroyed by fire recently, have completed the greater part of the reconstruction of their works. The capacity will be about 25,000 tons per year.

The Seaman, Kent Co., Limited, manufacturers of hardwood flooring and lumber, are fitting up a plant at West Lorne, Ont., for the production of hardwood flooring. This is their fifth factory specializing in the product.

The Canadian Kron Scale Co., propose to establish a plant at Montreal for the manufacture of Kron automatic industrial scales and Stuebing lift trucks, though it will be some time before all arrangements are completed.

The Buhl Stamping Co., Detroit, have taken a five-year lease of the Hiram Walker Cooperage on Walker Road, Walkerville, and will manufacture their lines in it for the Canadian market. The plant has 15,000 sq. feet. of space.

The extension to the bolt and nut department of the Steel Company of Canada's plant at Montreal, to which reference was made last month, will provide 60,000 square feet additional floor space. The new building will be four stories high, of reinforced concrete construction.

Rice Bros. Knitting Mills, 280 Dufferin Avenue, Winnipeg, who manufacture men's, ladies' and children's sweater coats and all kinds of knitted novelties, have recently enlarged their plant by the addition of three machines and expect to add four more within the next few months.

Because of lack of space to take care of manufactured goods, the International Plow Works of Canada, Limited, Hamilton, have decided to make an extension to the west of their present warehouse. The addition will be 208 feet long by 100 feet wide and will be four storeys high, giving 83,200 feet extra floor space for storage purposes.

Fellow Manufacturers



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Lead Pipe
Sheet Lead
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for all requirements

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TORONTO MONTREAL WINNIPEG VANCOUVER



General Efficiency Demands the Use of

BERNARD
Wood Split Pulleys

The war is ended so far as a continuation of the bloody combats of the battlefields is connected. But in the war after the war there will be waged lively battles for industrial supremacy wherein the advantage will lie with the plant equipped with the most economical and durable machinery.

Competition will be more intense, and in this connection, keep your eye on the overhead. It has been looming large these past few years and must certainly come down.

BERNARD Wood Split Pulleys will help you eliminate power waste; their cost is low, their efficiency is GREAT.

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Manufacturers of High-Grade Power Transmission Appliance
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Give your men Famous Five Files to work with and you will get good results.

Also teach them to turn in a file as soon as it becomes dull.

You do not need to be afraid to do this with Famous Five Files, because they will not grow dull quickly.

Specify them when ordering. They are:



R. L. Graham, who owns a large quantity of standing timber on Great La Cloche and Manitoulin Islands, has purchased a factory site on the water-front of Wiarton and will build a mill and wood-working factory on it, probably next spring.

While they have not definitely decided upon the extent of the enlargement, Piano Cases and Phonographs, Limited, Brantford, successors to the Brantford Piano Case Co., Limited, will extend their present factory sufficient to double their output.

The Percival Plow & Stove Co., Limited, Merrickville, Ont., anticipate erecting in the very near future a new moulding shop, with a capacity of at least 35 moulders, and a new machine shop. This will enable them to increase their output at least 200 per cent.

Confirmation is given by Mr. F. G. Daniels, General Manager of Dominion Textile Company, Limited, of the report that contracts have been placed by the Company for buildings to accommodate 3,500 new looms and 120,000 spindles. Details will be forthcoming later.

The Brantford Computing Scale Co., Limited, of Brantford, have recently completed an addition to their plant in which they are installing machinery which should enable them to double their output for 1920. Forty additional hands will be needed for the enlarged plant.

The factory at Roxton Falls, P.Q., lately operated by Mm. Fauteux Hardware, Ltd., of Pointe St. Charles, was recently sold by auction to Adolphe Desmarteaux, of South Roxton, P.Q., for $7,000. It was built originally by Wilfrid Poirier, of Roxton Falls as a casket factory, attached to which was a sawmill. It is understood that the new purchaser will use only the sawmill.



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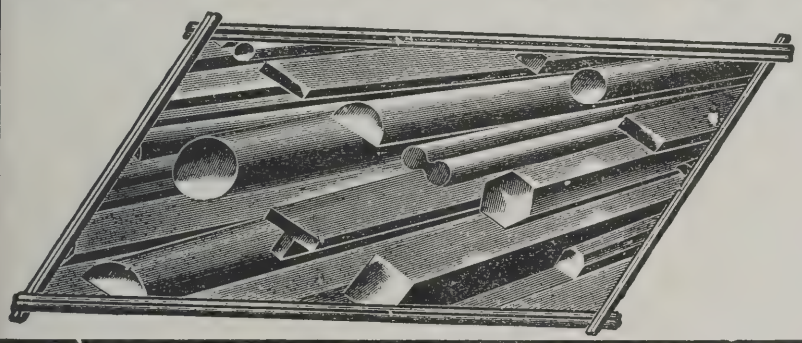
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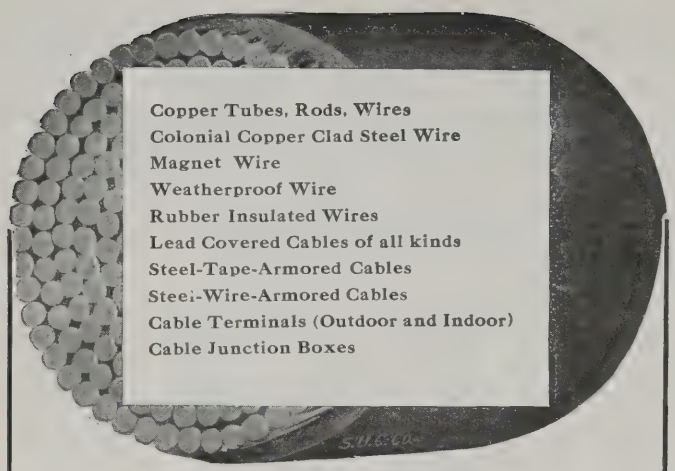
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STRUCTURAL STEEL AND STEEL PLATE WORK

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MacKINNON STEEL CO., LTD.

Sherbrooke - - - Quebec

Montreal Office: 404 NEW BIRKS BUILDING

The Toronto Carpet Manufacturing Co., Limited, have recently completed a large building on Mowat Avenue, adjacent to their present plant, and will eventually extend it north to King Street. It has been erected to house the carding and spinning plant, which required extra space to take care of the large demands upon it from the carpet department and the Barrymore Cloth Co.

The Albion Knitting Co have recently begun operations in a building on Park Street, Peterborough, formerly used as a school. Some of their machinery is placed and some fifteen hands are at work. More will be taken on as the machinery arrives. Toronto interests are behind the enterprise.

The Winnipeg Ceiling & Roofing Co., Limited, Winnipeg, are erecting a brick addition to their factory, 100 x 108 feet, with travelling crane, the purpose being for the manufacture of large oil containers, steel gasoline drums and kitchen range boilers. They are also building a distributing warehouse at Regina.

About $300,000 will be spent by the Spectator Printing Co., Hamilton, in building and equipping a new plant for the production and publishing of the *Spectator*. The new building will be a two-storey and basement fireproof structure, with a floor space of 34,000 square feet. The plant will be moved from the present building in July, 1920.

The Frost Steel & Wire Co., Limited, Hamilton, are enlarging their plant by the erection of a reinforced concrete extension, 90 x 60 feet, three storeys above grade, in which they will instal wire-making and fence-weaving machines. They expect to secure an increased production of approximately 25 per cent.

The Elgin Gas Motor Co., reference to whose location in Winnipeg was made in the November issue, are occupying a factory building which they themselves erected at 1424 Whyte Ave., Winnipeg. It is a brick building, 100 x 66 feet, three storeys. Fifty per cent. of the stock of the Canadian company is controlled by the parent company in Elgin, Ill.

The Canadian Tube & Iron Co., Limited, Montreal, are enlarging their wire mill building by an addition 100 x 83 feet, two storeys in height. This will enable them to secure an increased production in their wire and screw departments. They expect the building to be completed early in the New Year, when they will take on a number more men.

A three-story extension, 280 x 80 feet, is being added to their plant in Montreal by the Alaska Bedding, of Montreal, Limited. They are making the addition in the ordinary course of business, as they have been very much cramped for manufacturing space for a long time. The addition will be ready for occupancy early in 1920.

A new machine shop, 50 x 80 feet, is being erected by the Imperial Steel & Wire Co., Limited, Collingwood, and will be completely equipped with machinery. The Company have under consideration the manufacture of several new lines, but have not yet come to any decision. The plant will be capable of handling additional work to present lines.

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A few of our Specials

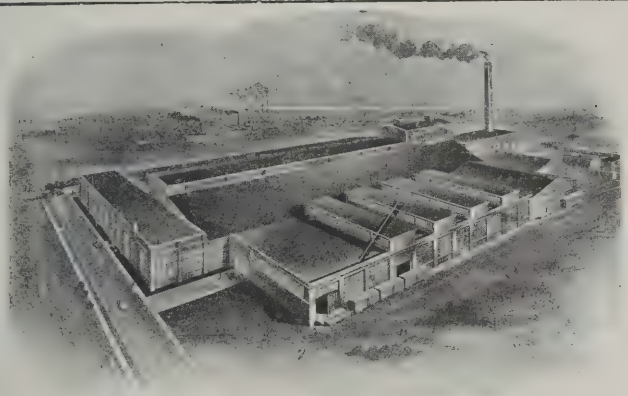
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THE CANADIAN BRIDGE CO., Limited

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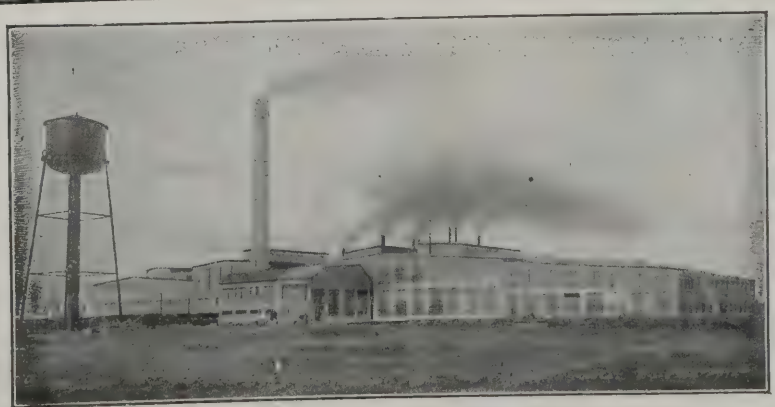
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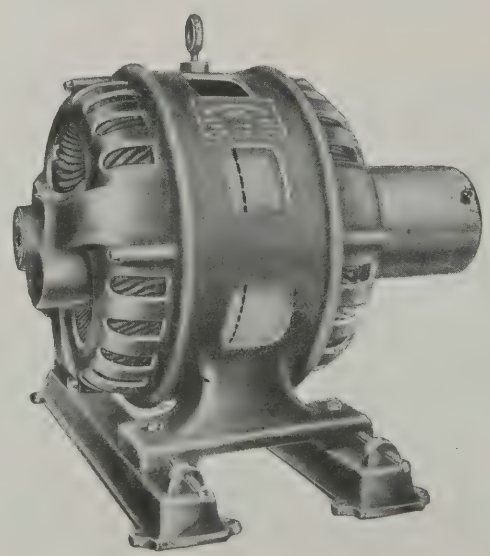
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REPAIR ALL KINDS OF ELECTRICAL MACHINERY

The Manufacturer's Bookshelf

A Useful Reference Book

Who's Who and Why, 1919-1920. Edited by B. M. Greene. Toronto: International Press, Limited.

This valuable compilation of biographical information about prominent Canadians represents an immense amount of painstaking research work. The volume extends to 1,524 pages, and averaging about three sketches to a page, contains references to some 4,500 persons. The inclusion of photographs of most of the people referred to adds considerably to the interest of the work, while the data about each person is as extended as it is possible to make it in the limited space at command. The editor, Mr. Greene, has done his work carefully and with good judgment and, if mistakes have crept into the book, they are rather to be attributed to the failure of those dealt with to correct proofs than to any shortcomings of the editor. On the whole it is a volume which those who wish to keep posted on personalities of the day cannot afford to be without. An index in the front gives rapid access to the material about any desired person.

A Book of Memoirs

Reminiscences, Political and Personal. By Sir John Willison. Toronto: McClelland & Stewart, Limited. Cloth, $4.00.

From a Canadian standpoint this is undoubtedly the outstanding book of the year. Indeed of its kind, it is one of the most notable volumes yet produced in the Dominion. To few men have the opportunity and the facility been given to write so intimately and entertainingly of the outstanding figures in the public life of the country during the past forty years. A trained journalist and one whose successive positions as member of the Press Gallery at Ottawa, editor of the Toronto *Globe* and editor of the Toronto *News* have brought him into close touch with the currents of political thought and action in Canada, Sir John has combined qualities and experiences which have fitted him admirably for a task to which he must have applied himself with a good deal of pleasure and satisfaction.

The book has been written with every evidence of impartiality. Political bias is absent from its pages and the author deals with the men and events of bygone days just as they appeared to a friendly and deeply interested onlooker. Through a plentiful use of anecdotal matter he has succeeded in imparting a light and vivacious tone to the work, which certainly adds to its charm. One can only regret that more of the scenes and surroundings of those earlier times have not been described. As it is Sir John has confined his effort very largely to sketching personalities and has left to the imagination the picturing of the various settings in which each played his part.

Not unnaturally, Canada's fiscal policy occupies a place in the book, though it is not dealt with in any controversial way. Sir John recalls the inception of the National Policy and reminds his readers that for a time it was doubtful whether it would be the Liberal or the Conservative party that was destined to sponsor protection.

"There is reason to believe," writes Sir John, "that if the Mackenzie Government had committed itself to higher duties, the Conservative Opposition would have adhered to



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low tariff. The common story is that when Sir Richard Cartwright arose to deliver the budget speech of 1876 it was not known if he would declare for or against higher duties, while Tupper, who was to follow, knew only that he would not agree with Cartwright." Sir John quotes N. F. Davin, W. F. Maclean, Dalton McCarthy and T. C. Patteson to show that Sir John A. Macdonald and the Conservative party were backward in advocating a policy of protection and only took it up because their opponents failed to do so.

Dealing with Edward Blake's resignation of the Liberal leadership, Sir John attributed his withdrawal in part at least to differences on the tariff question with Sir Richard Cartwright. Blake was not a free trader and Sir John quotes from two of his speeches to show that he held very sensible views on the subject of protection. Speaking at Malvern in 1887, Blake said: "No man, I care not how convinced an advocate of absolute free trade for Canada he may be, has yet suggested a practical plan whereby our great revenue needs can be met otherwise than by the continued imposition of very high duties on goods similar to those we make or can make within our own bounds or on the raw material. I invite the most ardent free trader in public life to present a plausible solution of this problem, and I contend that he is bound to do so before he talks of free trade as practicable in Canada. I have not believed it soluble in my day, and any chance of its solubility, if any chance there were, has been destroyed by the vast increase of our yearly charge, and by the other conditions which have been created. The thing is removed from the domain of practical politics." Surely very pertinent remarks for the present day!

One might continue to quote readable extracts from this new book to considerable length, but it is scarcely necessary to do so in order to demonstrate its value. A word should be added, however, regarding the printed work itself. Sir John, as President of the Canadian Reconstruction Association, may justifiably pride himself on the fact that his book is an all-Canadian production. It has been set up in a Canadian printing office, printed on Canadian-made paper, bound in a Canadian bindery and distributed by a Canadian publisher. And withal, it is a piece of work that compares most favorably with the best book manufacturing practise of other countries.

Work of the Conservation Commission

Conservation in 1918. By James White, F.R.G.S., M.E.I.C., Assistant to Chairman, Deputy Head, Commission of Conservation. Reprinted from Tenth Annual Report of the Commission of Conservation. Ottawa, 1919.

The field covered by the Commission of Conservation is thoroughly set forth in Mr. White's review of the activities of the Commission during 1918. Housing, public health, forests, lands, water-powers, mines, fuel shortage, fire prevention, game and wild life are all subjects in which the Commission is interested and is doing effective work. All good Canadians who are concerned with the conservation of the country's national resources would do well to read through this report, which gives in brief and compact form a good general idea of the problems that are being dealt with.

Under the name of the Kitchener Envelope & Stationery Co., an industry for the manufacture of envelopes and stationery has been established in Kitchener. Floor space has been rented, and as soon as all machinery has been installed, the company will be in a position to make any size envelope and in large quantities. The company has the financial backing of Mr. Arthur Boehmer, who has had many years' experience in the manufacturing of paper boxes.



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of your insurance premiums and eliminate all fire worries by having us protect your factory and its output with an

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Through bills of lading issued to all points in Australia, New Zealand, Tasmania and other islands of Oceania.

Marine Insurance effected at rates equal to those given from New York.

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The Norwegian Market

Opportunities for Trade Between Canada and the Scandinavian Countries Declared Good

That Canadian manufacturers could, with advantage to themselves, pay more attention to Scandinavian markets, especially that of Norway, is the opinion of H. E. Morton, commercial editor of *The Winnipeg Telegram*, who is closely in touch with conditions in Northern European countries.

Although Norway's shipping losses were considerable during the war, says Mr. Morton, these were greatly counterbalanced by the large amount of carrying done in Norwegian bottoms, Norske captains being among the most daring in running the gauntlet of German submarines. Their friendliness to Great Britain also impelled them to throw their lot in on the side of that country, with the result that to-day Norway is one of the most favored nations in Northern Europe.

Speaking financially—Norway does not ask for that extended credit which manufacturers are being asked to grant many other European countries, especially those in the Mediterranean. She has the cash for her size, and, if needs be, can pay for goods on the nail; but she wants them and wants them badly.

That the Norwegian Government is alive to the opportunities for trade with Canada is shown by the recent starting of a direct line of ships from Montreal to Norway, the first boat, the *S.S. Ranefjord* sailing on October 26. Unfortunately the season is late for many more sailings this winter; on account of the ice on the St. Lawrence, but next spring will, it is expected, see several large boats on this route, for which the C.P.R. is agent. Later, also a passenger service direct to Norway may also be started.

In the meanwhile, manufacturers wishing to be early in the market can ship via the Norwegian-American line from New York to Bergen or Christiania, or by the Scandinavian Line from New York to Sweden and Denmark.

Exhibition of Timber

Department of Overseas Trade of the British Government Announces Holding of Exhibition

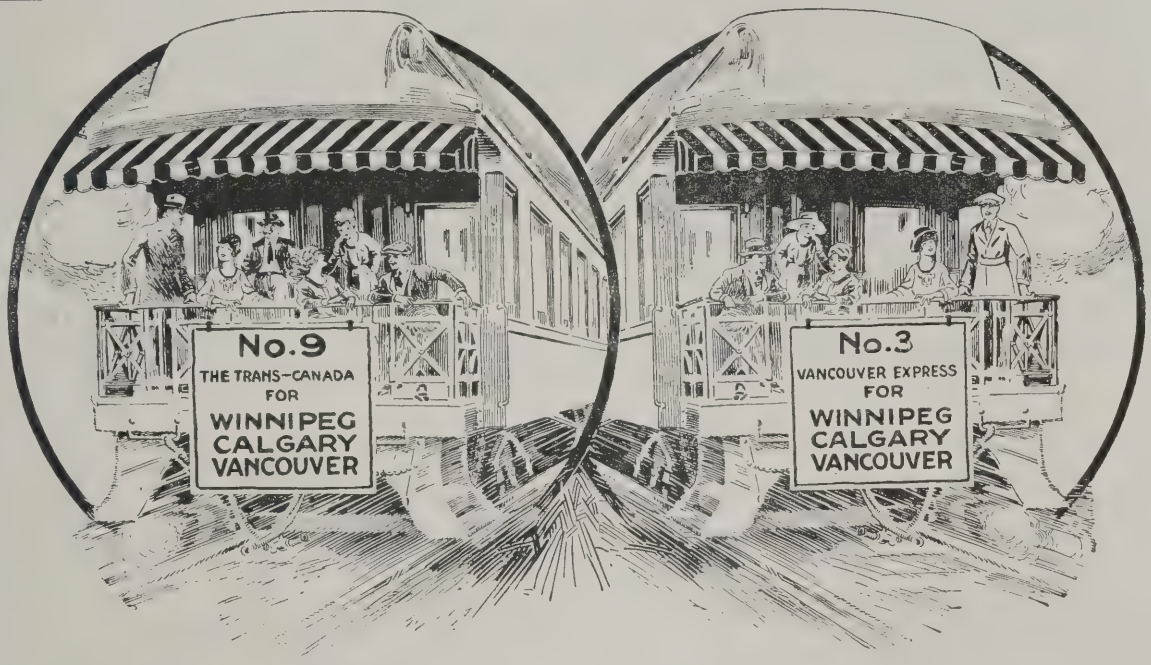
The British Trade Commissioners in Canada have been notified by the Department of Overseas Trade of the British Government that the Department are organizing an exhibition of timbers grown within the British Empire, to take place in London from the 5th July to 17th July, 1920.

The classification embraces: (*a*) Specimens of timber (polished and unpolished); (*b*) Exhibits demonstrating the various uses to which timbers are put, viz., floors, panelling, staircases, furniture, ply wood, and articles of everyday use; (*c*) Wood pulp.

A committee has been formed to arrange all details connected with the exhibition, and includes representatives of Colonial Office, Crown Agents for the Colonies, Government of India, Self-Governing Dominions, Forestry Authority, British Societies interested in the production and utilization of timber.

The main object of the exhibition is to bring prominently before architects, inspectors, firms who have to specify timbers in their contracts, as well as the users and consumers of timbers, the full range of Imperial grown timbers and especially those timbers which up to the present are only very slightly, if at all, known in this country, and at the same time to demonstrate the chief uses for which such timbers are suitable.

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41 Hours to Winnipeg
70 Hours to Calgary
96 Hours to Vancouver

Stops at and Connects for Principal Points

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Particulars from any Canadian Pacific Ticket Agents.

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Regular monthly sailings from Montreal in Summer and St. John, N.B., in Winter, calling at Cape Town, Algoa Bay (Port Elizabeth), East London, Port Natal (Durban) and Delagoa Bay in the order named.

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All steamers fitted with refrigerators for the carriage of perishable freight.

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Recent Trade Enquiries

A List of Enquiries Received from Various Sources including the Canadian Trade Mission, London; the Canadian Trade Commission, Ottawa; the Department of Trade and Commerce, Ottawa; and the Commercial Intelligence Department, C.M.A., Toronto.

DOMESTIC TRADE ENQUIRIES.

217a. Quebec.—A correspondent wishes to get in touch with firms in Ontario or the Western Provinces with a view to selling their products in Quebec.

FOREIGN TRADE ENQUIRIES.

218. Cairo.—A commission merchant in Cairo wishes to be connected with Canadian trade. He can sell large quantities of the following: News paper, printing paper, envelopes, flour, copper and iron stoves, agricultural machinery, wood of all sorts, and iron for constructing concrete houses.

219. Wire.—A Liverpool firm asks to be placed in touch with exporters of galvanized annealed mild steel wire, 8 to 24-wire gauge, and galvanized crucible steel wire, 85-90 tons per square inch, 12 to 30-wire gauge.

220. Motor Accessories.—A Liverpool firm wishes to hear from Canadian firms desiring agents for good lines of the above.

221. Motor Accessories.—A Liverpool firm asks to be placed in touch with exporters of the above.

222. Three-Plywood.—A Grimsby firm are prepared to purchase, cash against documents, large quantities of birch or alder plywood, in sheets 40 inches to 60 inches by 30 inches to 50 inches wide, and in thickness 3, 4, 5, 6 and 9 m/m.

223. Kitchen Cabinets.—A Liverpool firm would like to receive offers of kitchen cabinets and household labor-saving devices.

224. Maple Roller Blocks.—A Liverpool firm would like to get into communication with exporters of the above.

225. Pocket Lamp and Torch Batteries.—A London firm of importers of lighting accessories wish to obtain from Canada supplies of pocket lamp and torch batteries and ask for the addresses of manufacturers.

226. Machinery, Etc.—A recently demobilized Canadian officer who proposes to establish himself in business as the representative of Canadian manufacturers in the United Kingdom, would like to secure agencies in any line not requiring expert technical knowledge, but particularly in machinery, in which he possesses experience.

227. Iron and Steel Bars, Gas Pipes, Bolts, Nuts, Screws, Leather and Balata Belting.—A London firm of merchants and manufacturers' representatives seek supplies of iron and steel bars, gas tubes, bolts and nuts, screws, leather and balata belting for the Portuguese, Grecian and Near Eastern markets, and invite offers from Canadian manufacturers. References available at the Department of Trade and Commerce.

228. Canned Fruits.—The London branch of a company trading in Alsace-Lorraine wish to get into communication with Canadian manufacturers of high quality canned fruits.

229. An Italian firm is interested in the import of the following articles: Food products, metals, nickel ingots, nickel anodes, iron, steel products and pig iron. They desire quotations on the above commodities, C.I.F. Genoa, and are in a position to pay cash against documents.

230. Condensed Milk.—A company in Leeds ask for the addresses of Canadian manufacturers and exporters of condensed milk.

231. Cairo.—A commission merchant in Cairo is desirous of getting in touch with Canadian manufacturers of the following: box calf, patent leather, side leather, tinned goods, Canadian ham and bacon, flour, wood products. He is in a position to export gum, sesame, hides and cotton seed.

232. Leather and Shoe Grindery.—A leather merchant in Belfast is desirous of getting into communication with Canadian tanners, curriers and manufacturers of shoe grindery such as rivets, wood pegs, etc.

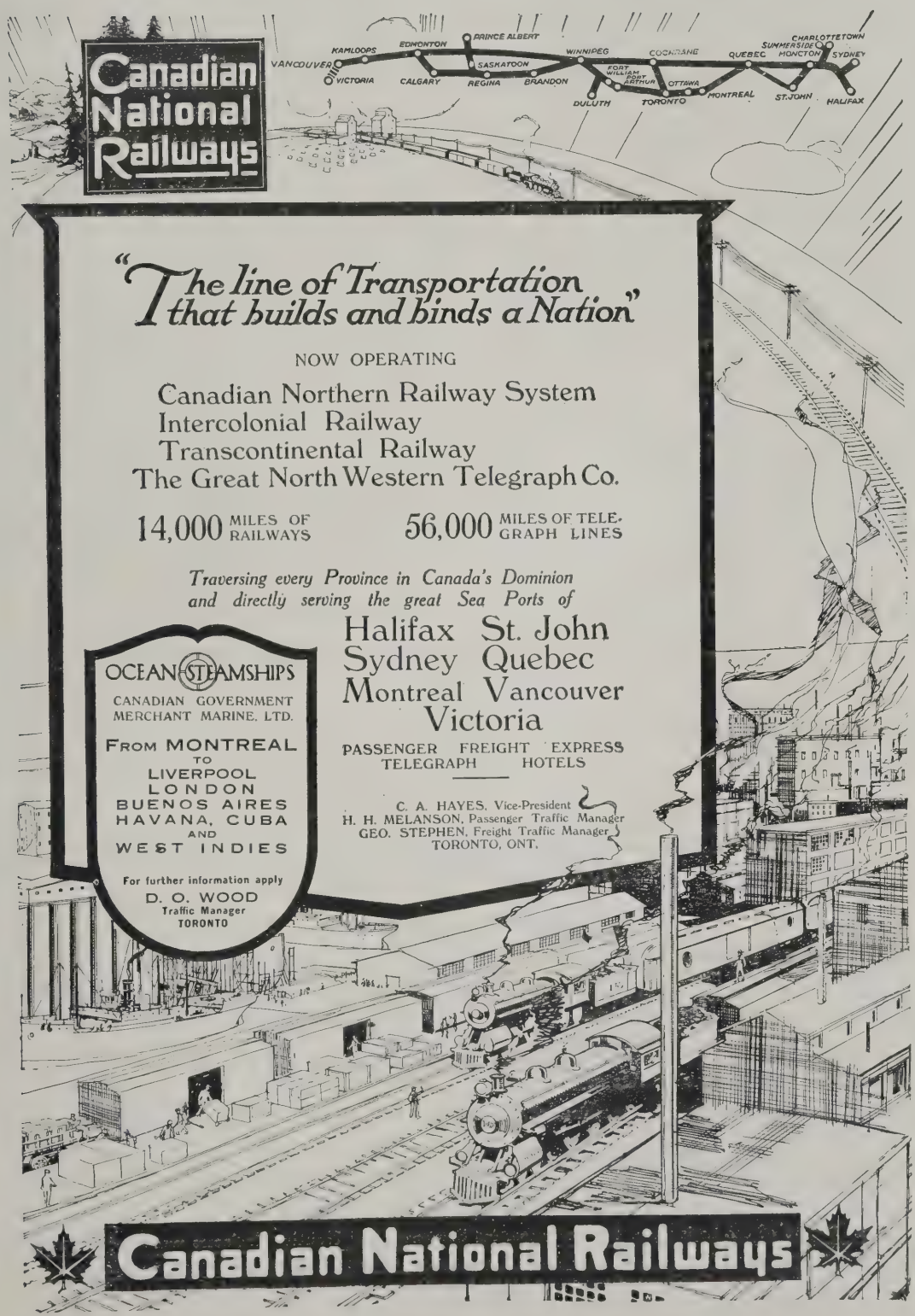
233. Maple Roller Blocks.—A Liverpool firm who are large primary distributors of the above, ask to be placed in touch with exporters.

234. Maple Roller Blocks.—A Lancaster firm who are large consumers of the above, ask to be placed in touch with exporters.

235. England.—A manufacturers' agent in London is anxious to secure agencies for Canadian soaps, perfumes, confectionery and essential oils. He already represents several houses in France and Italy.

236. Pharmaceutical Preparations, Chemicals, Surgical Instruments.—A correspondent in Brussels, Belgium, seeks the agency of Canadian manufacturers of pharmaceutical preparations, chemicals and surgical instruments.

237. Synthetic Drugs, Essential Oils, Etc.—A London company, who are manufacturers of, and dealers in, chemicals, report an opening for synthetic drugs, essential oils, etc., and wish to get into touch with Canadian manufacturers.


Canadian National Railways
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VICTORIA
KAMLOOPS
EDMONTON
CALGARY
PRINCE ALBERT
SASKATOON
REGINA
BRANDON
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FORT WILLIAM PORT ARTHUR
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238. Portable Houses.—A London company ask for the addresses of Canadian manufacturers of portable houses.

239. Vulcanite Dressing Combs.—A London firm enquires for the addresses of Canadian manufacturers of vulcanite rubber dressing combs.

240. Boots and Shoes, Worsteds, Flannels.—A London manufacturers' agent, claiming a connection among buyers in the United Kingdom and also in India, Egypt, and other eastern countries, wishes to get into communication with Canadian manufacturers of boots and shoes, worsted cloth and flannels, wishing to develop trade in these countries.

241. Foodstuffs, Sweets, Leathers.— A manufacturers' agent in Egypt, with good references, wishes to get into communication with Canadian manufacturers of the above who are in a position to start trade with the Middle East.

242. Egg Boxes and Egg Case Fillers.—A London provision agent wishes to get into touch with Canadian manufacturers of egg boxes and also of egg case fillers.

243. Agencies.—A Scotchman, who has been resident in Canada for a number of years and who has been brought up in the manufacturing business, wishes to represent some Canadian manufacturer in England or France. He has a good knowledge of French.

244. Warehouse Keepers and Cargo Supervisors.—As many Canadian houses shipping to England may sometimes require their shipments supervised on landing and distributed inland, a firm in Liverpool are in a position to furnish the following service: raw rubber and general produce experts; warehouse keepers and cargo supervisors; cartage and haulage contractors; general transport agents, etc.

245. Boots and Shoes.—A firm in Paris wishes to get into communication with Canadian manufacturers of boots and shoes. They have a good connection in around Paris, being agents for several well known French manufacturers.

246. A firm of industrial agents, with headquarters in Paris, consider the moment an opportune one to introduce Canadian industrial products in the French and Grecian markets and would like to get in touch with Canadian manufacturers.

247. Chenille Table Covers.—A firm in Sydney, Australia, wishes to get in touch with the Canadian manufacturer of Star Brand Chenille Table Covers.

248. French Olive Oil.—A correspondent in Liverpool wishes to get into communication with Canadian importers of pure olive oil. He represents a premier firm in France and is anxious to trade with Canada.

249. Australia and South Africa.—An import and export house in New York desires the names of some Canadian manufacturers particularly interested in export trade with South Africa and Australia. They have already shipped Canadian goods to those countries, but wish to further develop this trade. Their references are good.

250. England.—A newly-registered company of government contractors and manufacturers is prepared to accept agencies for Canadian firms for the following classes of merchandise: leather belting, engineering supplies, tool and lathe makers, belt lace makers, pulp and paper manufacturers.

251. Canned Salmon and Fruits.—A London firm trading throughout the East wishes to get into touch with Canadian packers of canned salmon, and also of canned fruits (pears, peaches, etc.) interested in the Indian, Egyptian and similar markets.

New Canadian Patents

A Number of Interesting Devices Which Have Lately been Patented in Canada

The following is a list of Canadian patents recently issued through the agency of Messrs. Ridout & Maybee, 156 Yonge Street, Toronto:

John L. H. Blackwood, button stick; Edward B. Killen, vehicle spring suspensions; Gutta Percha & Rubber, Limited, rubber mat; Fred L. Rapson, lifting jacks and the like for use on motor, road, and other vehicles; Woodington & Young, abrasive wheel; Huan A. Matear, internal spring heel seats; J. Stone & Co., Limited, valves for fluid pressure systems adapted for operating bulkhead and like doors; Farm & Dairy Machinery Co., pneumatic valve actuating devices; Edward Manser, acid still; Joseph Mayne, plow; Ewart McLaughlin, sockets for automobile curtain rods; Charles Taylor, dinner carry-alls; Gutta Percha & Rubber, Limited, process of forming rubber fabrics; Henry P. Fletcher, means for the conversion of water pastes into oil pastes by chemical and mechanical action; Thos. W. S. Hutchins, the manufacture of lamp black; Jabez Muskett, hose couplings and hose attaching devices; Diaphone Signal Co., Limited, metal bending and forming machine; Nils Testrup, methods of conducting high temperature reactions; John Forsyth, Limited, reversible cuffs; E. O. Williams, slipways for the construction of reinforced concrete ships, barges, floating structures and the like.

The Western Wheel & Foundries, Limited, St. Boniface, Man., expect to be operating by January 1. Their plant, which is nearing completion, consists of the main shop, 200 x 72 feet; cupola room, 100 x 45 feet, and wheel brake room, 80 x 40 feet, the whole costing approximately $60,000. They will manufacture car wheels and brake shoes for railway equipment.

HON. W. R. ROLLO,
Minister of Labour.

W. A. RIDDELL, M.A., Ph.D.,
Deputy Minister

Department of Labour

ONTARIO GOVERNMENT

Administration of:

The Department of Labour Act
The Bureau of Labour Act
The Stationary and Hoisting Engineers Act
The Building Trades Protection Act
The Factory, Shop and Office Building Act
The Steam Boiler Act
Employment Bureaus
Investigation and Research

Employment offices are in operation in 35 cities and towns of the Province, and are the Ontario units of the recently organized "Employment Service of Canada."

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The value of these bureaus will increase in proportion to the extent to which they are used by employers.

Notice to Steam Users

At the last Session of the Legislature, the Act respecting Stationary and Hoisting Engineers was amended, said amendment requires that on and after January the 1st, 1920, all stationary steam plants in the Province of Ontario must be registered with the Board of Stationary and Hoisting Engineers. Application forms for this purpose will be forwarded on request. The boiler horsepower and other information contained in these application forms is to be used for statistical purposes.

A Registration Certificate will be issued to each applicant.

W. C. McGHIE,
Chairman of Board
15 Queen's Park, Toronto

INDUSTRIAL CANADA

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Industrial Canada

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The Canadian Manufacturers Association
INCORPORATED

Vol. XX. TORONTO, JANUARY, 1920 No. 9

Editorial Comment

Canadian Industry in 1919

DURING 1919 Canadian industry passed through one of its most critical periods. On the signing of the Armistice in 1918, the manufacture of war material ceased overnight. Almost immediately demobilization of the Canadian Army began, and thousands of men every month were discharged into civilian life. Canadian manufacturers faced a threefold problem: First to re-adjust their plants from a war to a peace basis; second, to replace as far as possible temporary civilian employees by returned soldiers, and, third, to seek new markets or to revive old markets for the sale of goods in order to make the first and second operations financially possible. In other words, they had to change all round and still keep going ahead. Looking back over the past year, we do not quite know how it was done, but the thing was done, and with little check to industry on the whole. Perhaps the human agency after all had not a great deal to do with this happy result. Peculiar economic conditions furnished the greater part of the solution. Astonishing demands from Europe for all kinds of manufactured goods speedily developed. Consequently, our export trade did not suffer as much as might have been expected. At the same time, domestic demands for articles which could not be secured during the war, revived. In other words, the wants of peace in many lines had not been satisfied for nearly five years. These two conditions produced a strong and steady market for nearly all kinds of manufactured articles, and united in the task of stabilizing industry through the most trying period it has ever experienced in Canadian history.

Judge Masten's Report on Insurance

THE Ontario Government assured a deputation from the Ontario Division of this Association on January 7th, that a committee would be appointed at the coming session of the Legislature to study the report of the Insurance Commission by the Honorable Mr. Justice Masten, Commissioner, who investigated very carefully the whole subject of fire insurance as transacted in Ontario. The members of the deputation, in addition to urging for the appointment of the Committee of the Legislature, asked that an opportunity be given to present the views of manufacturers in regard to this report, which contained a great deal of valuable information and suggested much needed reforms in regard to the transaction of insurance.

The investigation before Mr. Justice Masten was most exhaustive, and a great deal of time and money was spent in securing and presenting the information, and therefore it is most important in the interest of manufacturers that action should be taken on the recommendations made by the Commissioner.

Labour Conditions in 1919

AT the beginning of 1919 the labor outlook was very dark indeed. The spectre of unemployment threatened the country. Labor appeared to be caught by sinister undercurrents. Disturbances and threats of strife became common. In the larger centres there was wild talk of revolution, and then, perhaps fortunately for the country as a whole, attempts were made to put into practice certain theories which had been advocated in regard to industrial relations. Immediately public opinion was awakened. It crystalized and decided that these theories would not do. They were rejected. Organized labor saw that if it hoped to keep the confidence of the country, it would have to purge itself of its undesirable elements, and organized labor, to its credit, acted with firmness and promptness in weeding out of its ranks those who advocated the adoption of unconstitutional and unlawful methods of securing their ends.

While illusory and revolutionary ideas seem to have been on the whole discredited, much attention has been given to what might be termed the development of better relations between employers and employees, and there has been a very real desire on the part of both employers and employees to study the conditions and laws governing industry and the special problems of all parties connected

with industry. Certain plans and proposals have been put into effect to give employees a greater responsibility and a more direct interest in industrial operations. It is too soon to decide which of these plans will be successful, but in a general way it would seem that co-operation and understanding appear to be taking the place of unnecessary strife and coercion. The prospect for 1920 is much brighter than it was at this time last year for 1919. In dealing with the subject of relations between employers and employees, it is well to remember that progress is made slowly and that anything really worth while is attained only after careful experiment and the most searching and earnest investigation into those principles that govern its constitution and operation.

The Eight-Hour Day

AT the International Labor Conference held in Washington, D.C., October 29th to November 29th, 1919, three of the Canadian delegates, viz: The Honorable N. W. Rowell, Honorable Senator Robertson and Mr. P. M. Draper, voted for the convention which recommended that the 8-hour day should be put into force by law in those countries stipulated in the convention. Mr. S. R. Parsons, delegate representing the employers, voted against the convention.

There is a misapprehension which has been carefully fostered in the minds of the public that the Peace Treaty made, or would make, the 8-hour day obligatory in the countries which signed the treaty. The treaty, however, only set forth as a principle that the 8-hour day should be a "standard to be aimed at," the inference being that it should be adopted by a country when the economic condition of that country justified such action. Even those who voted for the 8-hour day at the Peace Conference, had to recognize the theory which lay behind this principle to some extent, because certain countries, such as Japan and India, were excluded, or partially excepted, from the covenant.

The position taken by the employers of Canada at the National Industrial Conference in Ottawa in September, 1919, was that a commission should be appointed to undertake investigations as to the adaptability of the hours of labor principles of the Peace Treaty to the different industries of the country. They contended that the question was one which should be settled by economic conditions and not by an arbitrary law. They pointed out further that in a young and undeveloped country such as Canada the crying need was for greater production, especially at the present time, and that if an 8-hour day were enforced by law on all industry, production would inevitably be decreased.

The Government has been urged from various quarters to pass immediately an 8-hour day law. This it obviously cannot do until the constitutional point involved at least is settled. It is not by any means clear whether an 8-hour day law should be passed for all Canada by the Dominion Government, or whether separate legislation should be passed by each of the provinces. It is understood that the Government will first ascertain from competent authority whether or not it has the power to enact such legislation. This is obviously the proper thing to do, as it would be incredible folly to force an 8-hour day law through in the face of strong opposition and then find that it was unconstitutional.

Workmen's Compensation in Ontario

ONTARIO manufacturers are urging the Ontario Government to appoint a neutral Commissioner to the Workmen's Compensation Board, on which there is a vacancy. Members of the deputation from the Ontario Division of the Association pointed out to the Premier that they would prefer that neither the employers nor the employees should have the privilege of nominating a candidate for the vacancy. They stated further that it would not be in the interests of the administration of the Act to give the employees, who were beneficiaries under the Act, the right to name one of the commissioners, if the employers, who paid the assessments, were denied a similar right. The Board should be composed of three neutral commissioners. If the Board were composed, for example, of a representative of the employers and a representative of the employees, with a neutral Chairman, the tendency would be that it would become a one-man board with the other two commissioners acting as special pleaders for their particular interests. Progress could only be made in this case by the Chairman siding with one or other of the opposing factions in case of disagreement. The whole problem of the Board is to administer the Act equitably.

Another point urged by our Ontario members was that there is no necessity for the Board to create such a huge reserve. Manufacturers are deprived of the use of the surplus which has been paid in to the Board, above what is needed to pay current claims. This money should be productively used in industry, and only enough should be collected from employers to satisfy the demands for compensation for a reasonable period in advance.

The Farmers and the Eight-Hour Day

THOSE who advocated an 8-hour day law for all kinds of industry in Canada did not reckon sufficiently with the greatest of all industries, namely the farming industry. When the difficulty of applying the 8-hour day law to farming was brought to their attention, they tried to evade it by saying that farming could be excepted from the operation of the law. This might be all right for other kinds of workers, but it would be very bad for the farmers. For some years farmers have been complaining that their sons, daughters, hired men and domestic servants have been drawn away from the farms to the cities and towns by the attraction of shorter hours and higher pay which the urban communities offered. If

an 8-hour day law were passed which would still further decrease the number of hours in a factory, it is obvious that the attraction to the farmers' families and assistants would be increased. On the other hand, it is inevitable that reduction in hours must increase the cost of production of goods made in the shorter working time, and consequently the selling price of these goods would be also increased. Therefore, shortening the hours of labor in manufacturing presents a double disadvantage to the farmers: first, by drawing away their sons, daughters and domestic help to the cities, and second, by increasing the cost of the manufactured articles which the farmer must buy.

Those who calmly assumed, however, that the farmer would continue to be willing to work ten, twelve or fourteen hours a day, while other classes worked eight, are out in their reckoning.

In his address to the Dominion Grange in Toronto recently, Mr. J. C. Dixon, Master of the Grange, said in effect that if other people are going to have an 8-hour day, the farmers are going to have it also, although it would probably mean that city and town people would pay 30c a quart for milk, $2.00 a peck for potatoes, $5.00 a bushel for wheat and $1.00 a pound for butter. Mr. Dixon's theory of economics is quite sound. He knows that if the hours of labor on the farm are shortened, the quantity of food produced on the farm will be decreased, and consequently the selling price of the smaller amount of food produced will be proportionately increased. Mr. Dixon added that the introduction of an 8-hour day on the farm would probably do more than anything else to jolt city workers back to common sense.

Sane Counsel from a Banker

IN the course of his presidential address at the recent annual meeting of the Canadian Bank of Commerce, Sir Edmund Walker expressed views which will receive the hearty support of Canadian manufacturers. On the question of production, Sir Edmund was emphatic in his condemnation of useless argument when the world was so perilously short of necessities.

"It is not by standing idle while we discuss methods that we can get out of our present troubles," he declared. "If the call is to 'man the lifeboat,' we do not wait for academic discussion before the boat is launched on its life-saving mission, and too much argument between Capital and Labor, just now, is madness in view of what we seek to save. The rising curve of prices cannot be made to turn downward without an increase of production, nor can we face the heavy obligations left by the war except by greatly increased production."

Sir Edmund's comments on foreign trade, on the position of exchange, on the need for making the name "made in Canada" stand for quality, and on the great desirability of developing export business, were right to the point and will repay careful reading. His address is published elsewhere in this issue.

The Association and the Proposed Tariff Board

CERTAIN newspapers and individuals have been misrepresenting the attitude of this Association in regard to the proposal to create a tariff board. The attitude of the Association was set forth in the following resolution which was unanimously adopted at the Annual Meeting held in Toronto in June, 1919:

"Whereas, demands are made at frequent intervals by various sections of the Canadian people for radical changes in the Canadian Customs Tariff, and

"Whereas, such demands prevent the determination of the settled policy that is necessary for the development of industry and trade, and cause depression in business, unemployment and imperil invested capital, and

"Whereas, it is of vital importance that all industry should have reasonable assurance of stable conditions which will not be adversely and suddenly disturbed by unexpected and imperfectly considered tariff legislation.

"Therefore, be it resolved, that the Canadian Manufacturers' Association in annual meeting assembled in Toronto, on June 12th, 1919, respectfully urge the Dominion Government to appoint a permanent tariff board, acting in an advisory capacity to the Government, which will make a scientific study of the Canadian Customs Tariff and the tariffs of other countries with whose products Canadian producers are forced to compete, familiarize itself with costs of production at home and abroad, investigate the nature and probable national effect of all requests for tariff changes, and endeavor to frame a tariff that will serve the best interests of Canada, and thus assure the harmonious and all-round development of the country."

The Association has been recently charged with desiring to take away from the Government the control and fixing of the tariff schedules and to place this control in the hands of the proposed tariff board. The Association never at any time advocated such action. It would be idle to do so, because it would be unconstitutional. The Canadian customs tariff is an instrument of taxation and taxation cannot be vested in any body except Parliament. Parliament must always determine and fix the rates of duty under the customs tariff. The tariff board, as the resolution suggests, would merely act in an advisory capacity to Parliament. In other words, it would be an investigating body. The only reason for its creation is that it should provide a body of competent men who could pursue continuous investigations, not only into Canadian conditions, but also into the conditions of other countries. Members of Parliament have not time to do this, nor will anyone else who is not specially detailed for the task. A great deal of tariff legislation is haphazard and is based upon insufficient information. Proposals are made the subject of acrimonious debate, and the tariff is always floating about on the troubled sea of politics, with the result that through uncertainty of what may happen, business conditions are frequently and unnecessarily disturbed. A tariff board, if properly constituted, should be able to pursue disinterested investigations, and the results of its labours would be available for Parlia-

ment, which could accept or reject them according to its pleasure.

The Tariff Commission of the United States affords a precedent. It was originated by a Republican Government and continued and enlarged by a Democratic Government. It has just issued its third report, which is a very valuable document and contains an immense amount of information which could not have been secured by other means. Is there any good reason why we could not have a similar body in Canada?

National Industrial Conference in the United States

THE second Industrial Conference called by President Wilson published a preliminary statement on December 29th, setting forth a proposed plan for the creation of a National Industrial Tribunal, with twelve Regional Boards of Inquiry and Adjustment, to deal with labor disputes.

It is proposed that this National Industrial Tribunal be composed of nine members chosen by the President and confirmed by the Senate, three to be nominated by the Secretary of Commerce, three by the Secretary of Labor, and three presumably to be nominated by the President, not more than five of whom are to be of the same political party, and to constitute a Board of Appeal.

The Regional Boards of Inquiry and Adjustment are to be created from panels of employers and employees for each region. These panels, it is proposed, shall be prepared by the Secretary of Commerce and the Secretary of Labor, respectively, after conferences with employers and employees of the regions. Panels are to have the approval of the President, who has the power to remove any members of them.

In brief, the proposed plan would create a list of individuals from whom arbitrators or boards of inquiry could be selected. The statement of the Conference says that the objects of the proposed plan are as follows:

"The main objects of the above plan are to secure national co-ordination and to stimulate the formation of bodies for local adjustment. The requirement of unanimity of agreement has by experience in the United States proved remarkably successful and should assure such confidence that neither side can rightfully refuse to submit to adjustment. A precedent condition of such submission is that the interruption of production shall be delayed. The frank meeting of the parties in controversy together with other men skilled in questions at issue always gives promise of settlement. On the other hand, refusal to submit to the Board, not only inaugurates a legal inquiry, but also prejudices the obstinate party or parties in public opinion. Moreover, the fact that membership on the board of inquiry is available to either party to the conflict singly would tend further to weaken the position of the other. When both parties join, the Board at once becomes a Board of Adjustment, and conflict ceases by agreement until a determination is reached."

With respect to public utility industries, the statement says:

"While continuous operation of all utilities is conducive to the general convenience of the people, that of some of them is essential to their very existence. Of the latter class the railways are a conspicuous example and bear the same relation to the body politic as do the arteries to the human body. Suspension produces practical social and economic anarchy, and may impose hardships even to the point of starvation upon large sections of the community. The interruption in such essential public utilities is intolerable."

Respecting Government employees the statement says:

"The right of Government employees to associate for mutual protection, the advancement of their interests, or the presentation of grievances, cannot be denied, but no such employees who are connected with the administration of justice or the maintenance of public safety or public order should be permitted to join or retain membership in any organization which authorizes the use of the strike or which is affiliated with any organization which authorizes the strike."

The Industrial Conference has adjourned until January 12th.

Group Life Insurance

THE Department of Insurance of the Dominion Government has announced that it is now legally possible for Life Insurance Companies to transact Group Life Insurance in Canada; and that a number of American and Canadian companies have filed their rates with the Department and are ready to accept this type of insurance. The Insurance Committee of the Association has been studying this subject for over two years. In April last the results of their investigations were presented to the executive council, which decided to ask the Government to provide facilities for the transaction of this type of insurance.

Group Life Insurance permits the insuring of all the employees of a company under one policy. As a rule, the company pays the premium for all the policies. No medical examination is necessary. Investigation indicates that the only form of insurance which is practicable for an industrial plant is the One Year Renewable Term Insurance. The most popular form of contract appears to provide a preliminary insurance of $500 per employee, with annual increments. As a rule, no employee is insured unless he has been with the firm for six months.

Group Life Insurance as applied to factories has opponents as well as supporters. Although it has been introduced in England, the transactions have not yet reached any considerable volume.

At the last meeting of the National Association of Manufacturers in New York, May 1919, a report was submitted from the Committee on Industrial Betterment, Health and Safety which dealt with the subject of Group Life Insurance. The Committee had made an exhaustive investigation into the question and included testimonials from twenty-three large manufacturing concerns in the United States, all of whom had taken out Group Life Insurance on their employees, and were satisfied with the results.

Since that time a considerable number of manufacturing concerns in the United States have followed their example. On a subject on which the greatest experts are not agreed, it would be rash to hazard any opinion as to the ultimate success of the application of Group Life Insurance to manufacturing plants, but the Executive Council felt that as Group Life Insurance had been tried with

satisfaction by some manufacturers of other countries, and as some members of the Association wished to avail themselves of this type of insurance, the facilities for transacting it should be provided.

The chief arguments used in favor of Group Life Insurance are that it tends to decrease the volume of floating labor, and that it provides insurance for employees who otherwise, on account of physical defects, would not be able to secure it.

Where Will the Revenue Come From?

The Dominion Government needs the immense sum of $500,595,111 to pay its bills for the fiscal year ending March 31st, 1920. The question naturally arises, why does the Government need such a huge sum, and how does it propose to spend it? The following extracts from the official estimates explain how it is proposed to spend the money:

Public Debt, including Sinking Funds	$106,847,443.64
Railways and Canals—Capital	50,896,681.00
Railways and Canals—Income	36,287,394.16
Public Works—Capital—Marine Department	30,546,900.00
Pensions	30,053,646.72
Miscellaneous	26,676,233.00
Soldiers' Land Settlement	45,016,000.00
Soldiers' Civil Re-establishment—Outside Service	62,763,420.00
Post Office	19,701,530.25
Public Works—Income	12,098,883.14
Subsidies to Provinces	11,490,860.48
Civil Government	8,573,357.41
Railways and Canals—Collection of Revenue	7,849,000.00
Customs	4,815,000.00
Arts and Agriculture	4,748,000.00
Public Works—Capital	4,450,000.00
Militia and Defence	4,187,600.00
Dominion Lands—Income	5,683,745.00
Main Subsidies and Steamship Subventions	2,588,787.33
Royal Northwest Mounted Police	2,249,505.08
Lighthouse and Coast Service	2,205,800.00
Indians	1,946,853.00
Trade and Commerce	1,901,095.33
Ocean and River Service	1,812,300.00
Naval Service	1,805,000.00
Legislation	1,881,648.17
Administration of Justice	1,554,083.34
Immigration and Colonization	1,438,000.00
Excise	1,373,681.25
Fisheries	1,305,000.00
Penitentiaries	966,700.00
Public Works—Collection of Revenue	951,000.00
Mines and Geological Survey	765,400.00
Charges of Management	571,850.00
Scientific Institutions	457,785.00
Weights and Measures, Gas and Electric Light Inspection	417,510.00
Superannuation	400,000.00
Labor	427,500.00
Quarantine	241,000.00
Government of the Yukon Territory	215,000.00
Police	187,000.00
Steamboat Inspection	87,827.77
Marine Hospitals	78,000.00
Adulteration of Food, etc.	73,000.00
Government of the Northwest Territories	8,000.00
Total	$500,595,111.07

When we know what the money is needed for, the next question which arises is, where does the Government expect to get it? They realize that it is impossible, under our present system of taxation, to get all of it during the current year. Consequently, the Government has decided to borrow and add to the national debt the huge sum of $148,809,620.

Last year the Dominion Government revenue was $312,946,747.18, and was derived from the following sources:

Canadian Customs Tariff	$113,412,285.67	
Special War Tariff	44,726,091.67	
Total	$158,138,377.34	
Less drawback on Exports	10,969,189.36	
Net		$147,169,187.98
Inland Revenue (Excise)		30,342,034.26
Special War Revenue Act, 1915 (Part 1)		1,969,218.32
Business Profits War Tax Act and Income Tax, 1916		42,319,781.61
Other Special Tax Revenue		11,888.508.40
Other Sources		79,258,016.61
Total Revenue		$312,946,747.18

Briefly then, in round numbers the country's revenue problem is:

Needed this year	500 millions
Last year's revenue	312 millions
Shortage this year	188 millions

How then does the Government hope to make up this huge shortage? They have already decided to borrow 148 millions, so that the problem in regard to the shortage resolves itself into the following form:

Total deficit this year	188 millions
We will borrow	148 millions
We are still short	40 millions

Referring again to the figures above, it will be seen that the tariff provided 147 millions of revenue out of a total revenue of 312 millions. Those who advocate the abolition of or a great reduction in the tariff, are faced with the problem of finding other adequate means of providing revenue lost. Such alternative methods as direct taxes on unimproved land values and natural resources, increased taxation on personal incomes, increased inheritance taxes and increased taxation on corporations, are suggested. We have all these forms of taxation, and no doubt they will have to be increased if we are to pay our debts. At the present time we are not paying as we go. We must not forget that this year we are borrowing 148 millions. Can anyone contend that the forms of taxation suggested above would, for example, secure the 148 millions which we have already borrowed, and also the 40 millions of a deficit, and at the same time provide what was lost through reduction or abolition of the tariff? We cannot go on borrowing indefinitely. Sooner or later we must pay as we go, and the inevitable inference is that we will need the taxation derived through the tariff, in addition to any other legitimate form of taxation which can be devised, if the national expenditures are to be met.

The Organized Farmers and Their Platform

The Policies Enunciated by the Farmers of Canada to Secure the Enactment of which Members of the Canadian Council of Agriculture Declare Their Intention to Elect as Many Representatives as Possible to the Next House of Commons

(Reproduced from Official Sources)

What the Farmers Advocate

On this and the following pages will be found a reproduction of the Farmers' Platform, or, as it has recently been christened, the new National Policy for Canada. It is published in "Industrial Canada" for the information of those Canadian manufacturers who have not, as yet, had an opportunity to secure and study this important document. The avowed intention of the farmers to elect as many members as possible to the next House of Commons in order to secure the enactment of the policies advocated in the platform, makes it highly desirable that manufacturers should know exactly what it is that the farmers are after in their approaching political campaign.

A CONFERENCE of representatives from Western Grain Growers' Associations, and other similar organizations, was held in Winnipeg on January 6th, 1920, to complete plans for action in Federal politics. At the conclusion of the deliberations the following resolution was passed and given to the Press:—

"Whereas the cause of better government in Canada has been ever a principal consideration in the work and aspiration of the organized farmers' movement in all the provinces of the Dominion;

"And whereas this cause has been the dominating feature of our work as organized farmers, during the past twelve months;

"And whereas the need of continued action to bring into effect the reforms recommended in the farmers' platform which has been promulgated by the Canadian Council of Agriculture is most urgent, considered from the broadest national point of view;

"And whereas this platform, which has been described as a new national policy for Canada, is based upon the principle of the greatest good to the greatest number of people living in the Dominion, without regard to race, creed, or occupation; and is in no sense a demand for special legislation to benefit the few at the expense of the many;

"Therefore be it resolved that we, the members of the Canadian Council of Agriculture in conference with the accredited delegates of the Federal electoral districts of Alberta, Saskatchewan, and Manitba, and the representatives of the rural districts of Ontario, here assembled in the City of Winnipeg on this sixth day of January, 1920, do *declare our intention of electing as many representatives as possible to the House of Commons at the next general election, who will endeavour to bring the Farmers' Platform into effect; and to this end invite the support and assistance of all citizens who believe in the principles enunciated in this platform.*

"Whereas the poltical platform advocated by the organized farmers is in no sense a vocational class platform;

"And whereas it is the hope of those advocating this platform that those of all classes who believe in the principles enunciated in it will support candidates at the next federal election who will have been pledged to its support;

"Therefore be it resolved:

"That this platform shall be known in future as the 'New National Policy.'"

A second resolution was passed, embodying the decision of the Conference to continue organization on provincial lines, as follows:—

"Whereas political action amongst the organized farmers of the provinces here represented has been taken in response to the demands formulated in resolutions which were adopted by the provincial associations at their last annual conventions;

"And whereas, whatever political strength that exists at present amongst the organized farmers has been developed on the basis of organization within the provinces;

"And whereas for future action it is necessary to preserve intact that machinery and organization which have already been devised within the provinces;

"Therefore be it resolved that the political activities under the auspices of the organized farmers' movement shall continue for the present to be conducted on the provincial basis, according to any plans which the existing organizations may see fit to adopt.

In the pamphlet containing the "Farmers' Platform," which has been issued officially by the Canadian Council of Agriculture, its history is sketched as follows:—

"The Farmers' Platform first came into existence when it was drafted and published by the Canadian Council of Agriculture in December, 1916. It was subsequently unanimously endorsed at the annual conventions of the United Farmers of Ontario, the Manitoba Grain Growers' Association, the Saskatchewan Grain Growers' Association, and the United Farmers of Alberta. During the past two years several of the planks of the platform, such as woman suffrage, prohibition, income tax, and corporation tax have been adopted in full, and others partially, by the Federal Parliament. This fact, as well as changed conditions arising out of the war, necessitated some revision and extension of the platform. These were made by the Council which met at Winnipeg on November 26 to 29, 1918."

The official text of the "Farmers' Platform," published by the Canadian Council of Agriculture, Winnipeg, the central body with which many farmers' organizations are affiliated, follows:—

1. A League of Nations as an international organization to give permanence to the world's peace by removing old causes of conflict.

2. We believe that the further development of the British Empire should be sought along the lines of partnership between nations free and equal, under the present governmental system of British constitutional authority. We are strongly opposed to any attempt to centralize imperial control. Any attempt to set up an independent authority with power to bind the Dominions, whether this authority be termed parliament, council, or cabinet, would hamper the growth of responsible and informed democracy in the Dominions.

The Tariff

3. Whereas Canada is now confronted with a huge national war debt and other greatly increased financial obligations, which can be most readily and effectively reduced by the development of our natural resources, chief of which is agricultural lands;

"And whereas it is desirable that an agricultural career should be made attractive to our returned soldiers and the large anticipated immigration, and owing to the fact that this can best be accomplished by the development of a national policy which will reduce to a minimum the cost of living and the cost of production;

And whereas the war has revealed the amazing financial strength of Great Britain, which has enabled her to finance

not only her own part in the struggle, but also to assist in financing her Allies to the extent of hundreds of millions of pounds, this enviable position being due to the free trade policy which has enabled her to draw her supplies freely from every quarter of the globe, and consequently to undersell her competitors on the world's market, and because this policy has not only her own part in the struggle, but also to assist in strengthened the bonds of Empire by facilitating trade between the Motherland and her overseas dominions. We believe that the best interests of the Empire and of Canada would be served by reciprocal action on the part of Canada through gradual reductions of the tariff on British imports, having for its objects closer union and a better understanding between Canada and the Motherland, and at the same time bring about a great reduction in the cost of living to our Canadian people;

Fosters Combines

And whereas the Protective Tariff has fostered combines, trusts, and "gentlemen's agreements" in almost every line of Canadian industrial enterprise, by means of which the people of Canada—both urban and rural—have been shamefully exploited through the elimination of competition, the ruination of many of our smaller industries, and the advancement of prices on practically all manufactured goods to the full extent permitted by the tariff:

And whereas agriculture—the basic industry upon which the success of all other industries primarily depends—is unduly handicapped throughout Canada, as shown by the declining rural population in both Eastern and Western Canada, due largely to the greatly increased cost of agricultural implements and machinery, clothing, boots and shoes, building material, and practically everything the farmer has to buy, caused by the Protective Tariff, so that it is becoming impossible for farmers generally, under normal conditions, to carry on farming operations profitably;

And whereas the Protective Tariff is the most wasteful and costly method ever designed for raising national revenue, because for every dollar obtained thereby for the public treasury, at least three dollars pass into the pockets of the protected interests, thereby building up a privileged class at the expense of the masses, thus making the rich richer and the poor poorer;

And whereas the Protective Tariff has been and is a chief corrupting influence in our national life because the protected interests, in order to maintain their unjust privileges, have contributed lavishly to political and campaign funds, thus encouraging both political parties to look to them for support, thereby lowering the standard of public morality.

Definite Tariff Demands

Therefore be it resolved that the Canadian Council of Agriculture, representing the organized farmers of Canada, urges that, as a means of remedying these evils and bringing about much-needed social and economic reforms, our tariff laws should be amended as follows:—

(*a*) By an immediate and substantial all-round reduction of the customs tariff.

(*b*) By reducing the customs duty on goods imported from great Britain to one-half the rates charged under the general tariff, and that further gradual, uniform reductions be made in the remaining tariff on British imports that will ensure complete Free Trade between Great Britain and Canada in five years.

(*c*) That the Reciprocity Agreement of 1911, which still remains on the United States statute books, be accepted by the Parliament of Canada.

(*d*) That all foodstuff not included in the Reciprocity Agreement be placed on the free list.

(*e*) That agricultural implements, farm machinery, vehicles, fertilizers, coal, lumber, cement, illuminating fuel and lubricating oils be placed on the free list, and that all raw materials and machinery used in their manufacture also be placed on the free list.

(*f*) That all tariff concessions granted to other countries be immediately extended to Great Britain.

(*g*) That all corporations engaged in the manufacture of products protected by the customs tariff be obliged to publish annually comprehensive and accurate statements of their earnings.

(*h*) That every claim for tariff protection by any industry should be heard publicly before a special committee of Parliament.

Taxation Proposals

4. As these tariff reductions may very considerably reduce the national revenue from that source, the Canadian Council of Agriculture would recommend that, in order to provide the necessary additional revenue for carrying on the government of the country, and for the bearing of the cost of the war, direct taxation be imposed in the following manner:—

(*a*) By a direct tax on unimproved land values, including all national resources.

(*b*) By a graduated personal income tax.

(*c*) By a graduated inheritance tax on large estates.

(*d*) By a graduated income tax on the profits of corporations.

(*e*) That in levying and collecting the business profits tax the Dominion Government should insist that it be absolutely upon the basis of the actual cash invested in the business, and that no consideration be allowed for what is popularly known as watered stock.

(*f*) That no more natural resources be alienated from the Crown, but brought into use only under short-term leases, in which the interests of the public shall be properly safeguarded, such leases to be granted only by public auction.

The Returned Soldiers

5. With regard to the returned soldier we urge:—

(*a*) That it is the recognized duty of Canada to exercise all due diligence for the future well-being of the returned soldier and his dependents.

(*b*) That demobilization should take place only after return to Canada.

(*c*) That first selection for return and demobilization should be made in the order of length of service of those who have definite occupation awaiting them or have other assured means of support, preference being given first to married men, and then to the relative needs of industries, with care to insure so far as possible the discharge of farmers in time for the opening of spring work upon the land.

(*d*) That general demobilization should be gradual, aiming at the discharge of men only as it is found possible to secure steady employment.

(e) It is highly desirable that, if physically fit, discharged men should endeavor to return to their former occupation, and employers should be uged to reinstate such men in their former positions wherever possible.

(*f*) That vocational training should be confined to those who, while in the service, have become unfitted for their former occupation.

(*g*) That provision should be made for insurance at the public expense of unpensioned men who have become undesirable insurance risks while in the service.

(*h*) That facilities should be provided at the public expense that will enable returned soldiers to settle upon farming land, when by training or experience they are qualified to do so.

6. We recognize the very serious problem confronting labor in urban industry resulting from the cessation of war, and we urge that every means, economically feasible and practicable, should be used by federal, provincial and municipal authorities in relieving unemployment in the cities and towns; and, further, recommend the adoption of the principle of co-operation as the guiding spirit in the future relations between employer and employees—between capital and labor.

Land Settlement

7. A land settlement scheme based on a regulating influence in the selling price of land. Owners of idle areas should be obliged to file a selling price on their lands, that price also to be regarded as an assessable value for purposes of taxation.

8. Extension of co-operative agencies in agriculture to cover the whole field of marketing, including arrangements with consumers' societies for the supplying of foodstuffs at the lowest rates and with the minimum of middleman handling.

9. Public ownership and control of railway, water and aerial transportation, telephone, telegraph and express system, all projects in the development of natural power, and of the coal mining industry.

10. To bring about a greater measure of democracy in government we recommend:—

(*a*) The immediate repeal of the War Time Elections Act.

(*b*) The discontinuance of the practice of conferring titles upon citizens of Canada.

(*c*) The reform of the federal Senate.

(*d*) An immediate check upon the growth of government by order-in-council, and increased responsibility of individual members of Parliament in all legislation.

(*e*) The complete abolition of the patronage system.

(*f*) The publication of contributions and expenditures both before and after election campaigns.

(*g*) The removal of press censorship upon the restoration of peace and the immediate restoration of the rights of free speech.

(*h*) The setting forth by daily newspapers and periodical publications of the facts of their ownership and control.

(*i*) Proportional representation.

(*j*) The establishment of measures of direct legislation through the initiative, referendum and recall.

(*k*) The opening of seats in Parliament to women on the same terms as men.

Amendments to the Platform

The platform as above was officially amended at a meeting of the Canadian Council of Agriculture held in Winnipeg on November 11th—13th, 1919. The amendments are reported as follows in the *Grain Growers' Guide*, the official organ of the Canadian Council of Agriculture, in its issue of November 19th, 1919:—

"The repeal of the Reciprocity Act by the United States Congress made it necessary to revise the paragraphs relating thereto in the platform of the council. Paragraph (*c*) of section 4 was made to read: 'By endeavoring to secure unrestricted reciprocal trade in natural products with the United States, along the lines of the Reciprocity Agreement of 1911.' Paragraph (*d*) was made to read: 'By placing all foodstuffs on the free list.' Paragraph (*e*) was amended to read: 'That agricultural implements, farm and household machinery, vehicles, fertilizers, coal, lumber, cement, gasoline, illuminating fuel and lubricating oils be placed on the free list and that all raw materials and machinery used in their manufacture also be placed on the free list.'

"Under the heading 'Other Democratic Reforms,' the paragraph calling for the immediate repeal of the War-time Elections Act was considered no longer necessary, and was eliminated. New clauses were inserted recommending that the new Dominion Elections Act be based on the principle of establishing the federal electorate on the provincial franchise, and a naturalization act based upon personal naturalization only.

"The prohibition plank was placed in section 10 in the following terms: '(*m*) Prohibition of the manufacture, importation and sale of intoxicating liquors as beverages in Canada'."

Methods of Financing Export Business

By L. D. WILGRESS
Superintendent, Foreign Trade Department, Royal Bank of Canada

THE methods of financing export shipments may be roughly divided into two classes, as follows:

(1) When the responsibility for arranging the financing of the shipment rests with the importer of the goods;

(2) When the responsibility is borne by the exporter.

In the former case the method most usual in the case of exports from North America is for the importer to arrange with his bankers for the opening of a bank credit at the port of shipment in favor of the exporter. In the second case the exporter commonly draws a draft or a bill of exchange on the importer for the value of the shipment, attaching thereto all shipping documents. The exporter usually discounts the bill with his banker or has it forwarded for collection to the bank's branch or correspondent at the place in which the importer is located. The bill would be drawn payable at sight or at so many days after sight according to the terms agreed upon at the time of sale; documents would be surrendered upon payment or acceptance of the bill.

Bank credits are of a variety of different forms and a great deal depends on the customs of the country to which the goods are shipped, the class of goods concerned and the standing of the individual customers. Frequently the credit is a confirmed credit, in which case the bank informs the exporter that the credit has been opened and thereby holds itself responsible for the payment of the money. In an ordinary credit the bank assumes no such responsibility. Sometimes the credit is in the form of an authorization to the bank at port of shipment to accept the time drafts of the exporter under certain conditions. The latter is then able to discount these drafts, when accepted by the bank, in the open market. Bank credits are opened under certain stipulations as to amount, time of draft, and other conditions governing the drawing upon the credit. Credits are opened by the importer approaching his bank and the latter instructs its correspondent at port of shipment to open the credit in favor of the exporter. The matter is arranged between the importer and the bank with which he deals. A great deal, therefore, depends upon the standing of the importer. For arranging the credit the bank charges the importer a certain commission.

In the case of bank credits the exporter receives full payment for his goods upon shipment and compliance with the terms of the credit, which usually provide for the surrender of a full set of shipping documents, etc. The line of credit however, which the importer enjoys at his bank, is encroached upon to the amount of the credit and the length of the time during which it has to run. Where the standing of the customer justifies such a course, competition for trade is rendering more frequently necessary the adoption of the second procedure in the above classification. Bills drawn on foreign customers and covering a shipment of merchandise can nearly always be discounted at the Canadian bank of the exporter and part payment at least received for the goods shipped. The principal Canadian banks have established at head offices and leading branches a foreign department for the purpose of advising customers regarding the financing of export shipments. Particulars are given as to the terms on which drafts are negotiated, and acceptance and other credits established through correspondents or branches in foreign countries. Enquiries can be made through any of the branches of these banks as to the credit standing of prospective purchasers or for other information.

Before the war goods were commonly sold at terms ranging from 30 to 120 days sight; while for machinery and associate lines even longer terms of credit were extended. Changed conditions have restricted the practice of long terms, sight drafts and bank credits have become the most common mode of payment for goods. On the other hand competition for trade will undoubtedly restore to a certain extent the commercial practices prevailing before the war, and Canadian exporters, whenever the standing of the foreign customer justifies it, should extend the same terms as accorded by competitors. The above remarks on the financing of export business will have shown that this can be done with the assistance of the banks, so that payment may usually be received at least in part upon the handing over of documents. Naturally the cost of the service rendered by the bank is collected from the purchaser or else added to the invoice value of the goods.

The Labor Conference at Washington

A Summary of the Proceedings at the First International Labor Conference—The Main Arguments on the Question of the Eight-Hour Day—Recommendations Made by the Conference on Many Important Questions

By E. BLAKE ROBERTSON
Secretary, Ottawa Office, C.M.A.

In the December issue of INDUSTRIAL CANADA *there appeared a preliminary report on the proceedings at the First International Labor Conference at Washington, prepared by Mr. J. T. Stirrett, General Secretary. As this report was written before the Conference had concluded its sessions, it was necessarily incomplete. The following summary of the proceedings, by Mr. Robertson, covers the entire Conference. Part of it duplicates the report appearing in the December issue, but for the sake of giving a complete account of the historic gathering Mr. Robertson's summary is given in its entirety.*

[N accordance with the provisions of the Peace Treaty, the International Labor Conference convened at Washington, D.C., on October 29th, 1919. The agenda submitted by the nternational Organizing Committee covered the following tems:

1. Application of principle of the 8-hour day or of the 48-hours week.
2. Question of preventing or providing against unemployment.
3. Women's Employment:
   (a) Before and after child-birth, including the question of maternity benefit.
   (b) During the night.
   (c) In unhealthy processes.
4. Employment of Children:
   (a) Minimum age of employment.
   (b) During the night.
   (c) In unhealthy processes.
5. Extension and application of the International Conventions adopted t Berne in 1906, on the prohibition of night work for women employed n industry, and the prohibition of the use of white phosphorus in the ıanufacture of matches.

Some of the delegates were late in arriving, but during he latter part of the Conference the Government, employers nd workmen were represented from the following countries: Argentine Republic, Belgium, Canada, Republic of Czecho-Slovaque, Denmark, Finland, France, Great Britain, Greece, ndia, Italy, Japan, Netherlands, Norway, Panama, Peru, Poland, Portugal, Serbe-Croats-Slavenes, South Africa, Spain, Sweden, Switzerland and Jugo-Slav.

The Governments only were represented from Bolivia, Brazil, Chili, China, Colombia, Equador, Guatamela, Haiti, Nicaragua, Paraguay, Persia, Salvador, Siam, Uruguay, San Domingo and Venezuela.

The Government and employers only were represented from Cuba.

The first four days of the Conference were taken up in eneral organization and the appointment of the following ommittees:

ommittee on Credentials.....	5	
ommittee of Selection (arranging daily programme of work).....	24	Senator Robertson representing Canada.
ommittee on Standing Orders (Rules of Procedure)	9	Mr. Draper representing Canada.
ommittee on Applications for Admission	6	Mr. Rowell representing Canada.
ommittee on Unhealthy Processes	21	Mr. Draper representing Canada.
ommittee on Employment of Women	21	Mr. Draper representing Canada.
ommittee on Employment of Children	21	
ommittee on Tropical Countries.	24	
ommittee on Hours of Work....	17	Canadian Government, Employers and Workers represented.
ommittee on Unemployment.....	18	Canadian Government, Employers and Workers represented.

With short breaks for routine proceedings, the fifth, sixth, eventh, eighth and ninth days were devoted to a discussion f the eight-hours day and 48-hours week. Hon. Mr. Barnes introduced the matter in a pro-labor speech, the outstanding sentences of which were:

"Workers throughout the war have kept to their work in the hope and belief that shorter working hours would be made general after the war. They were promised that a shorter working day would be brought in after the war, and the Governments are now expected to fulfil the bond."

"We are after leisure rather than pay."

"My labor colleagues will think I have been somewhat moderate and modest in my proposals. If so, I would say to them that this Conference is not the last Conference; it is the first one. What we cannot do this year, we may do next year or the year after."

At the opening of the Conference on the sixth day Mr. Marjoribanks (Great Britain) submitted an alternative proposal regarding the 48-hours week, to be discussed at the same time as the Draft Convention; this alternative proposal contained the following wording:

"The Conference, while admitting the principle of the limitation of daily work to eight hours, or to a 48-hours week, is of the opinion, etc., etc."

The opinion of the Canadian employers' delegate was not in harmony with the majority of the other employers who sanctioned the alternative proposal, although the alternative proposal was much more satisfactory than the Draft Convention prepared by the organizing committee, in that it was limited to a recommendation only and provided that the enforcement of the proposed recommendation was dependent upon the formal acceptance of the recommendation by Austria, Belgium, Canada, Cuba, Denmark, France, Germany, Great Britain, Holland, India, Italy, Norway, Japan, Poland, Spain, Sweden, Switzerland, Czecho-Slovaque and United States.

Mr. Parsons' remarks on the eighth day of the Conference set forth clearly and concisely the reasons why Canada should not at the present time enact legislation along these lines. In connection with the argument that decreased hours must necessarily mean decreased production, it is interesting to note that the Hon. Mr. Barnes, in speaking of the reduction of hours in Japan, is reported on page 423 of the Provisional Records as saying:

"If you bring Japan down to the same level as other countries, you would be asking Japan to reduce her production by about 60 per cent., and you would be asking other countries to reduce theirs probably by about 10 per cent."

Other motions and propositions advocated the application of the eight-hours day to commerce, agriculture and ocean navigation, and likewise held that eight-hours day should be interpreted as meaning 44-hours week.

On the ninth day the Draft Convention prepared by the organizing committee, together with all suggested amendments thereto, was referred to a special committee of fifteen, which finished its consideration of the subject on November 22nd.

At the employers' caucus, strenuous opposition was offered to Mr. Parsons' proposal to speak against the draft as agreed upon by the committee of fifteen. With or without authority, the chairman of the committee offered to guarantee that Mr.

Rowell would not speak in favor of the eight-hour day but would restrain himself to a silent vote providing Mr. Parsons agreed to do likewise. This Mr. Parsons refused to do, and on the sixteenth day of the Conference submitted his statement or reasons why he was unable to support the Draft Convention. Mr. Barnes, replying, misquoted the Peace Treaty by saying:

"If you will look at Chapter 13 of the Peace Treaty, you will find nine general principles laid down, and one of those nine general principles is that an eight-hour day and a 48-hour week should be adopted by all signatory countries in so far as it had not then been adopted."

Re-written by Borden

It is an open secret that the nine general principles referred to were re-written by Sir Robert Borden, and that the phraseology finally used was much more indefinite and less binding than that in which the principles were originally enunciated. In referring to "right of association," "adequate living wage," and in fact to eight out of nine of the general principles laid down, clear and unequivocal language was used, but in referring to the eight-hours day it was referred to as a "standard to be aimed at."

When we speak of "standards to be aimed at," we usually refer to ideals or aspirations the final accomplishment of which is expected to take place in the dim and distant future rather than almost immediately. Without doubt, Mr. Barnes was aware of the re-writing of the nine principles and of the real reasons why they were re-written, and his remarks and the construction he placed upon the Peace Treaty were dangerously close to deliberate misquotation.

Mr. Rowell, speaking a few moments after Mr. Barnes, said:

"Mr. Parsons has very clearly presented the views of the employers, but in the last analysis the Governments in the different countries concerned must determine what the policy of the country should be, and my colleague and I, representing the Government of Canada, intend voting for this convention. I wish to say further, that while we appreciate the difficulties, Mr. President—and this section raises some of them—of the United States possibly adopting one policy and Canada another, I desire to make our position clear that the action of the Government of Canada does not depend upon the action of the Government of the United States in dealing with these matters. It has not in the past. It will not in the future. I desire to make that position clear because I notice in the press of the city and elsewhere, it has been assumed that Canada would not take any action unless the United States took action also."

These remarks were illogical because, while refusing to be bound by any action of the United States, they presupposed Canada being bound by the decisions reached by China, Persia Siam, and the other powers represented at the Conference.

The general attitude of the European delegates, whether Government or employers, on the question of hours was, by their own private admissions, dictated by a fear of revolution in their countries unless the demands of labor were partially met, and coupled with this there was doubtless a strong desire to place the necks of American nations in the same noose as that now encircling the European nations who have adopted the policy of complying with the demands of organized labor. Of the delegates from South American Republics, some were tinged with Socialistic ideas and the others had the Latin characteristic of adopting the line of least resistance and voted complacently with the majority, although in some cases at least such votes were not in conformity with their own real views as expressed in private conversation.

Each State ratifying the Draft Convention regarding hours of work agrees to bring its provisions into operation not later than July 1st, 1921. Relaxation as to length of hours, as to particular industries, and as to date of application, are married or single, and irrespective of age or nationality. Th made in the cases of Japan, British India, Greece and Rou mania. The Convention does not apply to China, Persia an Siam, whose hours of work shall be considered at a late Conference.

Given briefly, the Convention provides for an eight-hour day and a 48-hours week in all industrial undertakings, bu not in commerce or agriculture, nor to transport by sea o inland waterways, the latter of which is to be dealt with b a special conference. The provisions do not apply to person holding positions of supervision or management, nor to pe sons employed in a confidential capacity. Hours may be e ceeded in case of accident—actual or threatened—or in cas of urgent work to be done to machinery or plant. Where b the nature of the work it must be carried on continuously by a succession of shifts, hours may be lengthened up to bu not exceeding 56 in the week on the average. After consu tation with organizations of employers and workers co cerned, Governments may by regulation determine:

(1) Permanent exceptions that may be allowed in preparatory complementary work.
(2) Permanent exceptions for certain classes of workers whose wo is essentially intermittent.
(3) Temporary exceptions to deal with exceptional cases of pressu of work.

Such regulations shall fix the maximum of addition hours and pay for overtime shall not be less than one an one-quarter times regular rate, and such regulations shall b communicated to the International Labor Office. Employe will be required to keep posted up in conspicuous place notices regarding hours at which work begins and ends, an it shall be an offence against the law to employ perso outside the fixed hours.

The final vote on the Eight-Hour Day Convention was:

For	82—Including 13 votes from countries receiving special treatment.
Against	2—Messrs. Parsons and Paus, Employers' Delegates from Canada and Norway.
Abstention	1—Mr. Baldesi, Workmen's Delegate from Italy.

The Draft Convention concerning Unemployment, the pr visions of which the States ratifying same agree to bring in operation not later than July 1st, 1921, provides:

(1) For the prompt and systematic despatch of statistical inform tion to the International Labor Office by each State ratifying the C vention.
(2) The establishment of free public employment agencies, with co mittees including representatives of employers and workers to adv regarding the manner in which same shall be operated.
(3) States which have established systems of Unemployment Ins ance, shall upon terms agreed upon between the members concern make arrangements whereby workers belonging to one State and worki in the territory of another shall be admitted to the same rate of bene of insurance as those obtained for the workers belonging to the oth State.

Employment of Women

The States ratifying the "Draft Convention Concerni the Employment of Women Before and After Child-birth agree to bring its provisions into force not later than Ju 1st, 1922. The Convention provides that in industrial commercial undertakings no woman shall be permitted work during the six weeks following confinement; she sh have the right to leave her work if she produces a medi certificate stating that her confinement will probably ta place within six weeks; she is entitled, during the six wee period before and after confinement, to benefits sufficient the full and healthy maintenance of herself and child out public funds or by means of a system of insurance; if nursi her child, she shall be allowed half an hour twice a d during her working hours for the purpose; she cannot be d charged during the periods mentioned before or after c finement. These provisions apply to all women whet

benefits for the child apply whether the child is legitimate or illegitimate.

The Draft Convention concerning "Employment of Women during the Night" provides that no woman, without distinction of age, shall be employed during the night in any public or private industrial undertaking other than one in which only members of the same family are employed, and by the term "night" is meant a period of at least eleven consecutive hours, including the interval between ten o'clock in the evening and five o'clock in the morning. The States ratifying the Convention agree to bring the provisions of same into operation not later than July 1st, 1922. Provision is made for the suspension of this Convention in the case of India and Siam and for its non-application where there occurs an interruption of work which it was impossible to foresee and which is not of a recurring character, or where night work is necessary to preserve by course of treatment raw materials subject to rapid deterioration. In sixty days in each year, the night period may be reduced to ten hours in industrial undertakings, which are influenced by the seasons, and in all cases where exceptional circumstances demand it.

Employment of Children

The States ratifying the "Draft Convention Fixing the Minimum Age for Admission of Children to Industrial Employment" agree to bring its provisions into force not later than July 1st, 1922. Special provision is made in this Convention for Japan and India. In other countries no child under the age of 14 years shall be employed in any industrial undertaking except one in which only members of the same family are employed. Employers in industrial undertakings are required to keep registers of all persons under the age of 16 years employed by them, showing dates of birth.

The States ratifying the "Draft Convention Respecting Night Work of Young Persons Employed in Industry," agree to bring the provisions of the Convention into force not later than July 1st, 1922. It provides that young persons under 18 years of age shall not be employed during the night in any industrial undertaking other than one in which only members of the same family are employed, with the exception that those over the age of 16 may be employed on work which by reason of the nature of the process is required to be carried on continuously day and night, in the following industries:

(a) Manufacture of Iron and Steel.
(b) Glass Work.
(c) Manufacture of Paper.
(d) Manufacture of Raw Sugar.
(e) Gold Refining Reduction Work.

The term "night" signifies a period of at least eleven consecutive hours, including the interval between 10 o'clock in the evening and 5 o'clock in the morning. Provision for the relaxation of the restrictions regarding young persons between the ages of 16 and 18 is made in the case of emergency, and there are also special provisions covering lignite mines, the baking industry and work in tropical countries.

In addition to the Draft Convention, the following recommendations were made by the International Labor Conference to the States signatories to the Peace Treaty:

1. That measures be taken to prohibit the establishment of employment agencies which charge fees, and where such already exist to permit their operation under Government license only, and that all practical measures be taken to abolish such fee-charging agencies as soon as possible.
2. That the recruiting of bodies of workers in one country, with a view to their employment in another, should be permitted only by mutual agreement and after consultation with employers and workers in each country concerned.
3. That an effective system of unemployment insurance, operated either by the Government direct or through Government subventions, be established.
4. That the execution of all work undertaken by public authority be co-ordinated with a view to reserving such work as far as possible for periods of unemployment.
5. That reciprocity of treatment, as to the benefit of laws and regulations for the protection of workers and to the right of lawful organization, shall apply to foreign workers the same as to native workers.
6. That arrangement should be made for the disinfection of wool infected with anthrax spores, either in the country exporting such wool, or if that is not practicable, at the port of entry of the country importing such wool.
7. That in view of the danger involved to the function of maternity and to the physical development of children, women and young persons under the age of 18 years be excluded from employment in certain lead and zinc processes, and that the employment of women and young persons under 18 in certain other allied lead industries, be permitted only under certain enumerated and well defined restrictions.
8. That each State, which has not already done so, should establish as soon as possible not only a system of efficient factory inspection, but also in addition thereto a Government service especially charged with the duty of safeguarding the health of the workers, and which will keep in touch with the International Labor Office.
9. That each State that has not already done so should adhere to the International Convention adopted at Berne in 1906, on the Prohibition of the Use of White Phosphorus in the Manufacture of Matches.

Not satisfied with interfering with the private affairs of the countries represented at the Conference, the Conference at its final sitting passed a resolution directing the governing body of the International Labor Office to communicate the texts of the Draft Conventions to all the Governments of the States which are not members of the international labor organization, and to study the possible methods of inducing these States to embody the provisions of these Conventions in their domestic legislation. As a piece of unprecedented gall and impertinence, this resolution stands in a class by itself and ushers in a new era in the field of international relationships.

Of the outstanding subjects brought up at the Conference, which did not materialize into either Draft Convention or recommendations, the following are worthy of special note:

1. Abolition of private ownership of land.
2. International regulation of distribution of raw material.
3. International regulation of ocean freight rates.

(All advanced as cure-alls for unemployment.)

4. The recommendation to all Governments of the necessity of adopting suitable legislation in order to establish universal compulsory labor in keeping with individual attitudes and within the limitations required by a proper regard for health and human life.
5. In the Committee of Unemployment a determined effort was made to submit a draft convention providing that up to the age of 18 years young workers of both sexes would be required by law to receive a compulsory professional, complimentary, or technical education of at least 200 hours per year, times devoted to such courses to be allowed to such workers off their regular hours, without any decrease in pay therefor. This proposal was vigorously opposed by the Employers' Group, who compromised on a recommendation to the various States that measures be taken to provide facilities for technical education to all desiring to avail themselves of such. After the compromised recommendation was approved, the sponsors for a Draft Convention of more extended form asked that the subject be allowed to drop and that it should not be brought before the Conference. The subject was therefore not brought before the Conference and does not appear in the proceedings.

Convention Hurried Through

About the 15th of November it was decided that the Conference was to end November 29th, and it was only by steamroller methods that this was accomplished, and by the taking of votes in such a hurried manner that many did not understand what they were voting on. Even then, it was impossible to complete the work of the Conference and the consideration of next year's agenda was left in the hands of the governing body. Suggestions, however, had been put forward from day to day, and of these the following deserve special mention:

1. Introduction of a legal system of exemption from attachment of workmen's wages.
2. Prohibition of the use of the militia in labor conflicts or strikes.
3. Absolution of trade organizations from all responsibility for acts of individuals belonging to such organizations.
4. Legal recognition of trade unions as the only bodies with which to deal on all questions regarding skilled workers.
5. Application of 8-hour day to agriculture.
6. Appointment in each country of a representative of the International Labor Office to keep in touch with trade unions and see that decisions of the International Labor Conference are efficiently carried out.
7. Establishment of pensions for the aged and incapacitated.
8. The reduction of hours below that decided upon by the 1919 International Labor Conference.
9. Provision for a regular annual vacation for all employees.
10. Prohibition of the use of White Lead in house-painting operations.
11. Prohibition of the use of Mercury in felt hat making.

[A pamphlet containing the full text of the Convention and recommendations adopted by the International Labor Conference has been mailed to all members of the Association.]

News and Views of the Association

There will be found each month in this department a record of the various activities of the Canadian Manufacturers Association during the preceding month. The information is supplied to INDUSTRIAL CANADA officially, and all members of the Association are urged to acquire the habit of reading and checking over the contents of the department carefully in order to keep themselves posted on the work of the Association

Executive Council Meeting

The December meeting of the Executive Council was held at the Prince George Hotel, Toronto, on the afternoon of Thursday, December 18, with the first vice-president, Mr. J. S. McKinnon in the chair. The meeting was preceded by a luncheon arranged by the Toronto Branch, at which an illuminating address was delivered by Mr. S. R. Parsons, the representative of Canadian employers, on the work of the International Labor Conference at Washington. The large banquet hall of the Prince George was crowded and those present listened with the deepest interest to Mr. Parsons' report on the various aspects of the conference. The January meeting of Council will be held in Hamilton on January 28.

Membership Campaign Results

A short preliminary report on the progress of the National Membership Campaign was presented to the last meeting of the Executive Council on December 18, and this will be followed by a more detailed report at the January meeting, by which time results will be more complete. Up to the date of the report 134 new members had been secured in Ontario Division; 133 in Quebec Division; 54 in the Maritime Division; 28 in the Pacific Division and 10 in the Prairie Division. The campaign was handicapped in the Prairie Provinces owing to the Winnipeg election; the extraordinary coldness of the weather and the illness of the Secretary of the Division. A second campaign will be conducted in the Prairie Provinces early in the spring. At the beginning of the campaign, membership stood at 3,626. Adding the new members obtained up to the date of the council meeting, the total was 3,985.

Return of Information Obligatory

Attention of members to the necessity of furnishing desired information to the Dominion Bureau of Statistics is being directed by the Legal Department. Manufacturers, it is pointed out, have no option but to furnish the figures asked for. The Census and Statistics Act makes this quite clear.

The policy of the C.M.A. is to encourage manufacturers to complete these schedules as fully and accurately as practicable, not simpy because it is the law, but because the statistics compiled from the replies received serve a very useful purpose.

A year hence the same inquiry will be made of manufacturers, and they can simplify their work very greatly by remembering that fact and preparing for it.

All that is required of a manufacturer are answers that are reasonably correct. With respect to some items, there will be some manufacturers who cannot possibly give accurate answers—the error will sometimes be one way, sometimes another, but if all manufacturers give what they consider to be reasonably correct answers, the figures compiled will reflect the situation as regards Canada with sufficient accuracy.

It has come to our notice with respect to some manufacturers who have failed to return the schedules to the Dominion Bureau of Statistics, that the Department of Justice has been instructed to enter prosecutions. Presumably these prosecutions have not yet been commenced, but they will be, unless returns are made immediately.

Window Space in London

It will be of interest to Canadian manufacturers, who have sales representatives in London with samples, to know that Mr. F. G. Salter, European Traffic Manager of the Grand Trunk Railway, has very kindly placed the windows of the Grand Trunk office in Trafalgar Square at the disposal of Canadian manufacturers who may desire to use these windows for the purpose of exhibiting their goods.

The Association is also advised by the Canadian Mission in London that, following this splendid precedent of the Grand Trunk Railway, the Agent-General for the Province of Quebec, now states that he will be pleased to place at the disposal of Canadian manufacturers free of charge for a period of two weeks, one of the large windows in his offices.

In addition to these, it is understood that the Agent-General for British Columbia has made arrangements for British Columbia manufacturers to make exhibitions of their goods in a similar manner.

Specify Canadian Material

On instructions from the Executive Council, a circular was last month issued to the membership urging members to insist that material made in Canada be used as far as possible in all construction work over which they have any control. This is the result of complaints that have been made that architects and engineers, especially those who are citizens of other countries but are employed in Canada, are extending their habit of specifying foreign material in preference to Canadian material in the construction of buildings.

Marking Country of Origin on Imported Goods

Reporting to the last meeting of the Executive Council, the Tariff Committee recommended that the Dominion Government be asked to amend the Customs regulations so as to provide that each and every manufactured article imported into Canada from any other country, including countries of the British Empire, should be clearly marked so as to indicate definitely the country of origin.

It was recommended that the above regulation should be so worded as to strengthen the present Canadian Customs regulations as to "marking," by adding provisions similar to

the following regulation in the United States' Tariff Act of 1913, which deals with the same subject:

"F. Subsection 1. That all articles of foreign manufacture or production, which are capable of being marked, stamped, branded, or labeled, without injury, shall be marked, stamped, branded, or labeled in legible English words, in a conspicuous place that shall not be covered or obscured by any subsequent attachments, so as to indicate the country of origin. Said marking, stamping, branding, or labeling shall be as nearly indelible and permanent as the nature of the article will permit.

All packages containing imported articles shall be marked, stamped, branded, or labeled so as to indicate legibly and plainly, in English words, the country of origin and the quantity of their contents, and until marked in accordance with the directions prescribed in this section no articles or packages shall be delivered to the importer.

Should any article or package of imported merchandise be marked, stamped, branded, or labeled, so as not accurately to indicate the quantity, number, or measurement actually contained in such article or package, no delivery of the same shall be made to the importer until the mark, stamp, brand, or label, as the case may be, shall be changed so as to conform to the facts of the case.

The Secretary of the Treasury shall prescribe the necessary rules and regulations to carry out the foregoing provision."

Greater Production Committee

The Executive Committee has become strongly convinced of the necessity of increasing production throughout all branches of Canadian industry, and in order to determine on ways and means of accomplishing this result, has appointed a special committee to investigate and report. The chairman of this committee is E. Holt Gurney, and associated with him are H. A. Telfer and J. F. Mackay.

Imperial Press Conference

Arrangements are being made by a Committee of Canadian newspapermen, under the chairmanship of Lord Atholstan, of the *Montreal Star*, for the holding in Canada this summer of the Imperial Press Conference. This important gathering was to have been held in Canada in 1915, but the outbreak of war led to the cancellation of all plans and the postponement of the event until after the war was over. Leading journalists from all parts of the Empire will be present, and will tour the country from coast to coast. The Executive Committee, C.M.A., has recommended action by the Association along the lines of bringing information in regard to Canadian industries to the attention of the visitors.

Toronto Branch Membership Campaign

In connection with the National Membership Campaign, launched on December 1st, the Toronto Branch has added 60 new members, making the total membership of the Branch 901.

Niagara Falls Branch

A special meeting of the Niagara Falls Branch was held at the Clifton Hotel, Niagara Falls, on Tuesday, December 2nd. Messrs. J. E. Walsh, General Manager, and H. Macdonald, Secretary of the Division, were present as guests of the branch. Mr. E. R. Blew, the Chairman of the Niagara Falls Branch, welcomed the guests, and there was a large attendance of local manufacturers. Mr. Walsh gave an interesting summary of the revised organization of the Association, explaining that all subjects which are of interest to manufacturers are studied by the various committees, and that the Association is prepared to render advice concerning them. The chief purpose of the Association is to develop and extend the industrial activities of Canada.

H. Macdonald explained the diversity of the services rendered by the Legal Department, and gave striking instances of the development of exports from Canada of domestic products, during the last five years. Comparing 1913 and 1918, the percentage of increase has been:

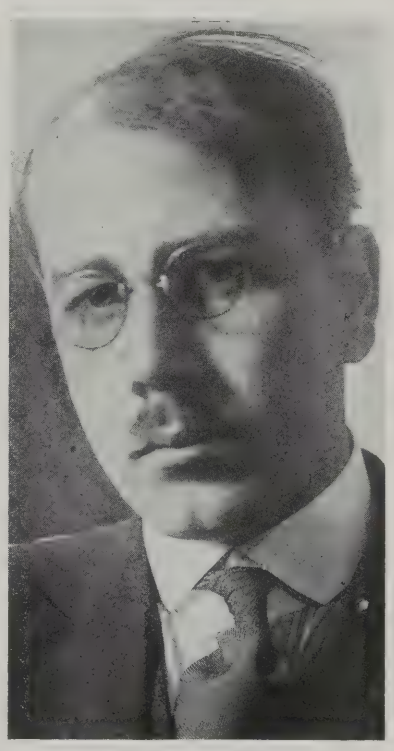
For Mines	30	per cent.
Fisheries	100	"
Forests	10	"
Animals	300	"
Agriculture	275	"
Manufacturers	1,350	"

The meeting discussed the effect upon the local industries of the shortage of electrical energy, and finally agreed that the situation called for action of some kind on behalf of the Association, and Mr. Walsh promised that the matter would receive prompt attention.

The organization of the Niagara Falls Branch is now thoroughly efficient and representative of the local industries.

New Secretary of Quebec Division

An important change in the staff of the Montreal office of the Association took place during the past month. Mr. W. P. Hughes, who has served as secretary of the Montreal branch since March, 1917, and latterly as secretary of the Quebec Division, has resigned to engage in private business. On the recommendation of the Executive Committee of the Division, the Executive Committee of the General Association has engaged Mr. R. W. Gould as his successor.



R. W. Gould
New Secretary of the Quebec Division

The new secretary is a Nova Scotian, having been born in Guysborough in that province. For the past nine years he has been engaged in newspaper work throughout Canada, working in Halifax, N.S., St. John, N.B., Fort William and Port Arthur, and more recently on the writing staff of the *Montreal Star*. Prior to entering the newspaper game. Mr. Gould was in the passenger department of the Dominion Atlantic Railway and later employed in the Nova Scotia Legislative Council and Crown Lands Office. No Nova Scotian's education is patriotically complete without a taste of the sea, and for a time he was purser on a coastwise freight steamer running out of Halifax. His qualifications for his new position are therefore of the best.

Canadian Materials Should be Specified

Complaints have been made to the Executive Committee and Executive Council that architects and engineers, especially those who are citizens of other countries but who are employed in Canada, are extending their habit of specifying foreign material in preference to Canadian material, in the construction of buildings. The Executive Council has asked

the Special Committee of Toronto Branch, dealing with this subject, to take all necessary steps to counteract this tendency. Conferences are being held with associations representing engineers and architects in Canada, for the purpose of securing their co-operation.

In the meantime the Executive Council has instructed a circular to be sent to all members of the Association asking them to insist that material "Made in Canada" be used as far as possible in all construction work over which they have any control.

Report of the Insurance Department

The following are the various points on which the Department has been consulted during the months of October and November, the figures representing the number of inquiries under each subject:

	October.	November.
Standing of Companies	1	1
Sprinkler Equipments	2	1
Policy Wordings	13	1
Rates	11	9
Building Construction	5	4
Inspection Service	5	7
Co-Insurance Clause	3	..
Examination of Policies	..	1

Group Life Insurance

The Insurance Committee reported on December 18 that final action had been taken in regard to Group Life Insurance. Discussion on this subject was opened with the Government in letter from the Insurance Department of the Association dated September 19th, 1917, arising out of requests from several members for information.

Considerable objection to Group Life Insurance in Canada was raised by the friendly societies and leaders of various trade unions. The Insurance Committee continued to investigate the subject and to gather all possible information and statistics relating to it.

On April 24th, 1919, the following resolution of the committee was approved by the Executive Council:

"That the Insurance Committee proceed to take the necessary steps to have the Insurance Act amended so as to provide more satisfactorily for the transaction of Group Life Insurance in Canada."

In accordance with the above instructions received from council the committee asked the Department of Insurance to provide the necessary facilities for the transaction of Industrial Group Life Insurance in Canada. Various obstacles and objections to Group Life Insurance having now been removed it is possible for life insurance companies to insure groups of employees in this country without examination and at considerably lower rates than have been hitherto available. The Superintendent of Insurance, Department of Insurance, Ottawa, notified us under date of December 5th, 1919, that the following life insurance companies are authorized to transact Group Life Insurance in Canada:

Sun Life Assurance Company. Head Office, Montreal. President, T. B. Macaulay.

Ætna Life Insurance Company. Head Office, Hartford, Conn. Chief Agent in Canada, E. J. Christmas, Montreal.

Equitable Life Assurance Society of the United States. Head Office, New York. Chief Agent in Canada, Gerald F. Brophy.

Metropolitan Life Insurance Company of New York. Head Office, New York. Chief Agent in Canada, Wm. L. Scott, Ottawa.

Travelers Insurance Company of Hartford. Head Office, Hartford, Conn. Chief Agent in Canada, Hon. Geo. G. Foster, Montreal.

The Insurance Committee has also been advised by the General Superintendent of the Canada Life Assurance Company, Toronto, and also by the Life Underwriters' Association of Canada, that the Canada Life Assurance Company is now ready to transact Group Life Insurance. We are also informed unofficially that other Canadian insurance companies will file rates with the Dominion Government Department of Insurance in the near future.

The Insurance Committee believes that the only form of insurance which is practicable on the group plan is the One Year Renewable Term Insurance. All other forms are found to be too expensive to be borne by the employers alone. There is no equity under an annual term policy unless its renewal is maintained, which accounts for the low premiums charged. No medical examination is required of the employees providing a certain percentage, not less than 75 per cent. of the total employees of a single firm, in included in the insurance. The advantages of group insurance have been proved in the United States to be very great. It has the effect of doing away with a great many labor troubles, discouraging strikes and generally improving the morale of the employees. An employer of labor can to a large extent dictate the terms of the contract. He may insure employees for the amount of their annual wages or for an arbitrary amount. A favorite plan in the United States is to start the insurance at say $500 per employee and increase the amount by annual increments, thus providing a reward for continuous service. It is usual not to insure any employee until he has been a certain length of time, say three or six months, in the manufacturer's employment. This has been found to do away to some extent with the problems of casual labor. The rates charged are extremely low, but, of course, increase each year with the age of the individual employees. A great number of manufacturers in Canada are already considering this class of insurance, and it appears likely that before very long the majority of large employers of labor will protect their employees in this manner.

The Insurance Committee recommends that a circular be issued to members containing a synopsis of the information detailed above, drawing their attention to the fact that facilities for the transaction of Group Life Insurance are now available, and without any attempt to discuss the comparative merits of the various types of Group Life Insurance which are being offered by the companies.

Winnipeg Members Hear Report

At a meeting of members held at the Fort Garry Hotel, Winnipeg, on December 16, a report on the International Labor Conference at Washington was presented by Messrs. James G. Merrick and J. B. Hugg, K.C., who had acted as advisers to Mr. S. R. Parsons, the Canadian employers' delegate.

During the month of December the following applications for membership were received by the Prairie Division:—

FIRM	REPRESENTATIVE.
J. Murray & Co.	J. Murray, Winnipeg.
The Record Press	W. R. Thornton, Brandon.
Brandon Mattress Factory	W. A. Qua, Brandon.
Thomas Lewis Arnett	J H. Arnett, Regina.
National Drug and Chemical Co.	D. S. Cunningham, Winnipeg.
Brandon Harness Co.	J. H. Mathews, Brandon.
Thomas Lewis Arnett	Leslie Arnett, Winnipeg.
Anchor Elevator Co.	D. J. McGillivray, Winnipeg.
Currie Mfg. and Lumber Co.	W. J. Currie, Brandon.
Crescent Creamery Co.	Aaron Stoodley, Brandon.
Crescent Creamery Co.	Robert Barbour, Yorkton.
Winnipeg Telegram	M. McCulloch, Winnipeg.
Chevrolet Motor Co.	F. F. Guscott, Winnipeg.
The Humberstone Coal Co., Ltd.	Mrs. Beata Humberstone, Edmonton.

Off to Australia

One of the Association's most active members in Winnipeg, Mr. E. Parnell, left home at the end of November for an extended trip to Australia and the Orient. Prior to leaving he was the guest of the Winnipeg Branch at luncheon at the Royal Alexandra Hotel, at which function he was pre-

nted with a travelling bag. Mr. Parnell was elected chairan of the Winnipeg Branch at the annual meeting in May st, but resigned when he was named to represent the emoyers on the Industrial Disputes Board. He has been a ember of the executive and chairman of the Legislative ommittee of the Branch for some years.

mples Are Invited

The Commercial Intelligence Department has received the llowing announcement, which may prove of interest to the embership:

"The Penang Chinese Chamber of Commerce, Penang, raits Settlements, having a membership of nearly 600, is esirous of fostering trade between this port and countries broad, and with this object in view, a separate room in the premises of the Chamber is being prepared for the display of samples and catalogues, which manufacturers abroad may send for the inspection of the Chinese merchants here. There is a tendency among the local capitalists to promote industries to which our local raw materials are adapted, and samples and catalogues of all kinds of manufactured goods may prove interesting and lead to business."

British Industries Fair

It is announced by F. W. Field, British Trade Commissioner, Toronto, that admission to the British Industries Fair to be held at London, Birmingham and Glasgow in February next, is by invitation only. Canadian buyers who propose to visit the Fair can obtain invitations from the British Trade Commissioners in Canada at Montreal, Toronto, and Winnipeg, respectively.

New Members Admitted During December

NAMES, ADDRESSES, AND PRODUCTS

THE following comprises a list of 121 applications for membership passed upon favorably at the December eeting of the Executive Council:

Alberta.

dcliffe....Ross Clay Products Co., Ltd. ..Brick.

British Columbia.

ncouver...B. C. Box Co., Ltd. .....Boxes.
ncouver...Canadian Bag Co., Ltd., Percy Broadfoot .....Additional Rep.
ncouver...Dominion Rubber System (Pacific) Ltd., W. A. Allan. .....Additional Rep.
lowna.....Kelowna Saw Mill Co., Ltd. ....Lumber and Boxes.
ncouver...Northern B.C., Fisheries, Ltd. ...Lumber and Boxes.
" Pacific Box Co., Ltd. .....Boxes, Pails.
mmerland..Summerland Lumber Co., Ltd. ..Lumber and Boxes.

Manitoba.

nnipeg,...Winnipeg Upholstering Mfg. Co., Ltd. .....Chairs, Couches.

New Brunswick.

ack's Har.Connors Bros., Ltd. .....Sardines and Sea Foods.
John....Portland Rolling Mills, Ltd. ....Bars, Ship and Railway Spikes, Bolts.
John....Murray & Gregory, Ltd. .....Lumber.
ckville....Enterprise Foundry Co., F. A. Fisher. .....Additional Rep.

Nova Scotia.

dney.....Cross Fertilizer Co., Ltd., Andrew Livingstone. .....Additional Rep.

Ontario.

r.....Hilborn Co., Ltd. .....Agricultural Implements.
ampton...Hercules Rubber Co., Ltd. .....Auto Tires, Tubes.
antford...Cockshutt Plow Co., Ltd., Geo. Wedlake .....Additional Rep.
antford...Slingsby Mfg. Co., Ltd., C. G. Cockshutt .....Additional Rep.
ippawa...Norton Company, A. E. Shero....Additional Rep.
bourg....Douglas Packing Co. .....Cider and Vinegar.
t.....Preston & Schwartz, Ltd. .....Taps, Dies, etc.
elph.....Guelph Paper Box Co. .....Paper Boxes.
elph.....Sherer Gillett Co., Ltd. .....Display Counters.
elph.....F. E. Partridge Rubber Co., Ltd.Rubber Goods.
milton....Canadian Drawn Steel Co., Ltd., Chas R. Brown.....Additional Rep.
milton....Canadian Polishes, Ltd., H. C. Trenaman .....Additional Rep.
milton....Canadian Westinghouse Co., Ltd., C. H. O. Cook .....Additional Rep.
milton....Canadian Hart Wheels, Ltd., A. T. S. C. Meldrum .....Additional Rep.
milton....Dominion Glass Co., Ltd., J. W. King .....Additional Rep.
speler....Universal Lightning Rod Co. ....Lightning Rods and Fixtures.
ngston....Hanson, Crozier & Edgar .....Printers.
amington..Rock City Tobacco Co., Ltd., Olivier Drouin .....Additional Rep.
. Dennis..Bettys Limited .....Jams.
hawa.....Williams Piano Co., Ltd., H. P. Bull .....Additional Rep.
awa.....A. J. Alexandor, Ltd., A. E. Alexandor .....Additional Rep.
awa.....Travers Aprons, Ltd. .....Aprons.
en Sound..Richardson, Bond & Wright, Ltd.Blank Books, etc.
terborough.Albion Knitting Co., Ltd. .....Jerseys, Bathing Suits.
terborough.Bon Marche Mfg. Co., Ltd. ....Ladies' Wear and Fancy Goods.
terborough.Gemmell & Co. .....Whitewear.
Peterborough.Lavoie Knitters. .....Rib Hose and Sweaters.
Peterborough.Peterborough Lumber Co., Ltd...Lumber, Shingles.
Peterborough.Peterborough Review Co., Ltd. ..Record Books, Boxes.
Peterborough.Peterborough Cereal Co., Ltd., B. H. Myers. .....Additional Rep.
Peterborough.A. Stewart. .....Woolstock, Carding.
Plattsville....Plattsville Milling Co. .....Flour and Feed.
Port Arthur..Port Arthur Pulp & Paper Co. ..Sulphite Pulp.
Port Hope....Wm. Hood. .....Hosiery.
S. S. Marie..McPhail & Wright Construction Co.Sash, Doors, Trim.
St. CatharinesCanada Hair Cloth Co., Ltd., J. Ivan McSloy .....Additional Rep.
Sandwich....Fisher Wilkie, Ltd. .....Engines and Castings.
Toronto.....Aked & Co., Ltd. .....Worsted Yarns.
Toronto.....Alco Mfg. Co., Ltd. .....Dresses.
Toronto.....Barber-Ellis, Ltd., F. M. Ellis. ..Additional Rep.
Toronto.....Berger Tailoring Co., Ltd. ....Clothing.
Toronto.....C. J. Bodley, Ltd. .....Cake and Biscuits.
Toronto.....Boeckh Co., Ltd., Chas. B. Boeckh.Additional Rep.
Toronto.....R. E. Jamieson, of Canadian Consolidated Rubber Co., Ltd...Additional Rep.
Toronto.....Canadian General Electric Co., E. K. W. Wedd .....Additional Rep.
Toronto.....Canadian Post Card Co. .....Photographs.
Toronto.....Carter Welding Co. of Toronto, Ltd. .....Oxy-acetylene welding.
Toronto.....Central Casket Co., Ltd., R. Cooper .....Undertakers' Supplies.
Toronto.....F. Colyer Mfg. Co. .....Tools, Dies, Motors.
Toronto.....Cooke & Boulton .....Floor Wax & Varnishes.
Toronto.....Counter Costume Co., Ltd. ....Misses' Dresses.
Toronto.....Davis Slate & Mfg. Co., Ltd. ....Electrical Slate for Switchboards.
Toronto.....Diamond State Fibre Co., Ltd. ..Fibre Sheets, Rods.
Toronto.....Engravers Metal Co., Ltd. .....Engravers' Plates.
Toronto.....Excelsior Electric Dairy Machinery, Ltd. .....Cream Separators and Electric Motors.
Toronto.....Frankel Mfg. Co. .....Dresses and Skirts.
Toronto.....General Phonograph Corp'n., Ltd.Phonograph Motors.
Toronto.....A. C. Gilbert Menzies, Co., Ltd.Steel Construction Toys and Fancy Goods.
Toronto.....The Globe, Wm. Findlay .....Additional Rep.
Toronto.....Ideal Bread Co. .....Bread.
Port Hope....Ideal Clothing Co. .....Mens' and Boys' Pants.
Toronto.....Julius, Cohen & Josephy, Clifford Jackson .....Additional Rep.
Toronto.....Lea-Trimble Mfg. Co. .....Children's Furniture.
Toronto.....Litho-Print, Ltd. .....Lithographing, Printing.
Toronto.....J. M. Loose & Sons, Ltd. .....Piano Actions and Keys.
Toronto.....Macdonald Mfg. Co., W. T. Bell..Additional Rep.
Toronto.....T. Milburn Co., Ltd. .....Medicines.
Toronto.....Moore-Telford, Ltd. .....Printing and Type.
Toronto.....National Lithographing Co. ....Lithography.
Toronto.....J. B. Nicholson, Ltd. .....Concrete Products.
Toronto.....Ontario Soap & Oil Co. .....Soft and Liquid Soaps.
Toronto.....Peerless Artificial Stone, Ltd. ..Artificial Stone.
Toronto.....Penfound Varnish Co. .....Varnishes, Shellacs.
Toronto.....Richards Glass Co., Ltd. .....Druggists' Glassware.
Toronto.....Rockland Cocoa & Chocolate Co., Ltd. .....Chocolate and Cocoa.
Toronto.....Sharples Separator Co. .....Cream Separators.
Toronto.....Standard Lithographic Co. of Can.Lithographing.
Toronto.....Star Specialty Co. .....Iron Specialty Work.
Toronto.....W. H. Sumbling Machinery Co. ..Laundry Machinery.
Toronto.....Sunbeam Chemical Co. of Can. Ltd.Rit Dye.
Toronto.....Telfer Bros., Wm. Latimer .....Additional Rep.
Toronto.....H. C. Tidman & Co. .....Steel Clipper.
Toronto.....Toronto Envelope Co., Ltd. ....Envelopes.
Toronto.....Union Iron & Metal Co., Ltd. ..Wrought Iron Washers.
Toronto.....Union Iron & Metal Co., Ltd., A. Davis .....Additional Rep.
Toronto.....Wilcox Engraving Co. .....Photo Engravings.
Toronto.....E. J. Woodison Co., Ltd. .....Foundry Facings.
Trenton.....Frankford Canning Co., Ltd. ....Canned Goods.

Trenton	Durham Canning Co., Ltd.	Canned Goods.
Walkerville	F. W. Jeffress, Ltd.	Extracts and Grocers' Specialties.
Walkerville	Square D. Company	Electric Switches.
Walkerville	Square D. Company, C. H. Keeling.	Additional Rep.
Wallaceburg	Dominion Glass Co., Ltd., T. B. Dundas	Additional Rep.
Welland	Canada Foundries & Forgings, Ltd., B. J. McCormick	Additional Rep.
Welland	Metals Chemical. Ltd., R. L. Charles	Additional Rep.
Woodstock	Peerless Cereal Mills, Ltd.	Rolled Oats.

Prince Edward Island.

Georgetown	Eastern Canneries, Ltd.	Canned Lobsters.

Quebec.

Buckingham	Quebec Graphite Co., Ltd.	Dry Lubricants.
Montreal	C. S. Allen & Co.	Candy and Grocers' Supplies.
Montreal	Thos. V. Bell, Ltd., Jas. K. Thompson	Additional Rep.
Montreal	Canadian Cottons, Ltd., Alex. Bruce	Additional Rep.
Montreal	Dominion Glass Co., Ltd., M. Offer, A. H. Grier.	Additional Rep.
Montreal	Julius L. Gittleson & Co.	Men's Waterproof.
Montreal	Holland Varnish Co., Ltd., H. W. Thorp (Addtl. Rep.)	Varnishes, Enamels.
Montreal	The Redmond Co., Ltd.	Furs.
Three Rivers	Wabasso Cotton Co., Ltd., W. G. E. Aird (Addtl. Rep.)	Fine White Cottons.

Activities of the British Columbia Division

By H. DALTON
Secretary, British Columbia Division

THROUGH recent additions, the membership of the British Columbia Division now comprises 147 manufacturers in all parts of the province. The services and policies of the Association are gradually becoming better known and appreciated, and manufacturers are showing an increasing willingness to support the Association. The following is a list of new members recently admitted:—

British Columbia Box Co., Ltd., Vancouver.
Dominion Rubber System, Ltd., Vancouver.
Pacific Box Co., Ltd., Vancouver.
Northern B.C. Fisheries, Ltd., Vancouver.
Beaver Cove Lumber & Pulp Co., Vancouver.
Stanley Watson Glove Co., Vancouver.
W. H. Malkin Co., Ltd., Vancouver.
Mrs. Haine, Ltd., Vancouver.
Timms, A. H., Vancouver.
Almonds, Ltd., Vancouver.
McClary Manufacturing Co., Ltd., Vancouver.
Kelly Douglas & Co., Ltd., Vancouver.
Robertson & Hackett, Ltd., Vancouver.
Canadian Bag Co., Ltd., Vancouver.
Vancouver Lumber Co., Ltd., Vancouver.
Kelowna Saw Mills Co., Ltd., Kelowna.
Summerland Lumber Co., Summerland.
Dalziel Box Co., Victoria.
Diggon Printing Co., Victoria.
Lemon Gonnason Co., Ltd., Victoria.
Moore-Whittington Lumber Co., Victoria.
Sidney Rubber Roofing Co., Ltd., Sidney.
Crawford Bros., Kelowna.

Fuel Oil Supplies for Fisheries

For a number of years it has been a matter of great inconvenience to British Columbia fishing companies having certain vessels acting as tenders to their fishing fleets, being unable to ex-warehouse from customs bonds, gasoline and distillate for the use of the ships actually engaged in the catching of fish, as it was necessary for these latter vessels, working sometimes at great distances from customs ports, to lose considerable time in proceeding to one of these ports to obtain fuel supplies.

The Tariff Department of the Association, acting on representations made recently by this Division, have procured from the Department of Customs an order permitting masters of vessels acting as tenders to carry these fuel supplies for the fishing boats. The fishing interests of British Columbia express themselves as extremely gratified with this action on the part of the Association, as numerous representations to the Department of Customs from other sources have heretofore been unproductive of results.

Canadian Mercantile Marine

Messrs. R. C. Vaughan and D. O. Wood, vice-president and traffic manager respectively of the Canadian National Railways, were recently visitors to the Vancouver office. While in Vancouver, interviews were arranged for them with representatives of the fish and fruit industries of British Columbia, and with various prominent shippers. As a result of these interviews, it was settled that the four steamers to be placed on the Canadian-Australian route will be equipped with adequate refrigerator space, to handle various perishable commodities from British Columbia, for which there is a large market in the Antipodes, but from which the shippers here have been almost entirely excluded owing to their being unable to secure adequate space on the present line of steamers.

Canadian Trade Commissioners

Messrs. Egan, Ross and Beddoe, while in Vancouver, recently made their headquarters at the Association's offices. Many interviews were arranged for them with various gentlemen interested in trade with the countries in which Messrs. Egan, Ross and Beddoe are the Canadian representatives. Before their departure they expressed themselves as highly gratified with the facilities placed at their disposal, and the great amount of information they had gathered as to the possibilities of trade from this coast to Australia and New Zealand.

British Columbia Box Manufacturers

The box manufacturers of British Columbia, at a meeting held recently in Vancouver, decided to form a Section of this Division, and this Section has now been organized, comprising the following firms:—

Armstrong Saw Mill, Armstrong.
B.C. Box Co., Ltd., Vancouver.
B.C. Manufacturing Co., Ltd., New Westminster.
Brunette Saw Mills Co., Ltd., New Westminster.
Cameron Lumber Co., Ltd., Victoria.
Crawford Bros., Kelowna.
The Dalziel Box Co., Victoria.
Kelowna Saw Mills Co., Ltd., Kelowna.
Lemon Gonnason Co., Ltd., Victoria.
Northern B.C. Fisheries, Ltd., Vancouver.
Pacific Box Co., Ltd., Vancouver.
Summerland Lumber Co., Ltd., Summerland.

The chairman of the Section is Mr. R. B. Sharpe of the Pacific Box Co., and the vice-chairmen, Mr. D. Lloyd-Jones of the Kelowna Saw Mills Co., and Mr. W. B. Mitchell of the Cameron Lumber Co., Victoria. The chairman of the Local Committee is Mr. P. J. McMurphy of the B.C. Manufacturing Co., New Westminster, and of the Export Committee, Mr. H. C. Airth of the Brunette Saw Mills Co.; Mr. J. H. McDonald of the B.C. Manufacturing Co. acts as treasurer.

Maximum Wage Regulations for Fruit and Fish Industries

The Minimum Wage Board of British Columbia held sittings during December to fix minimum wages, hours of labor, working conditions, etc., in connection with the fruit and fish industries of this province. Following the hearing of evidence from representatives of fishing concerns and cannery plants a minimum wage scale was fixed for women over 18 years of age employed in fish-curing plants of $15.50 per week. New employees are to receive $12.75 for the first four months

13.75 for the second four months, and $14.75 for the third our months, after which the $15.50 minimum will apply. These rates are for an eight-hour day or forty-eight hour week.

Owing to the uncertainty of conditions, also because of he shortness of the season in the canning branch of the fish ndustry, no minimum wage or restrictions as to hours are et for that class of work.

The Minimum Wage Board held two sessions in regard to he fruit industry, one at Kelowna on December 12th, and nother in Vancouver on December 19th, as a result of which minimum wage of $14.00 for females engaged in this industry, 18 years of age and over, based on an eight-hour day or forty-eight hour week. Beginners will be paid at the rate of $10.00 for the first month, $11.00 for the second, and $12.00 for the third, after which the minimum wage must be paid. This ruling applies to all classes of female labor in the fruit industry except fruit-pickers.

An important concession obtained by representatives of employers was permission from the Minimum Wage Board to work for a period of ninety days in any one season a maximum of sixty hours per week, for which female employees will be paid $18.00 per week. Employers are allowed to select the portion of the season in which they prefer to work these extended hours; this being necessary owing to fruit-packing establishments in different parts of the province having to deal with different classes of fruit, some of which come on the market much earlier than others.

Ontario Division's Organization is Completed

BY H. MACDONALD

Secretary Ontario Division, C.M.A.

THE Ontario Division Executive convened in the Association's offices on the 18th current and completed the organization, the officers and committees being:

Chairman.

Geo. H. Douglas.....Thornton & Douglas, Ltd., Hamilton.

Vice-Chairman.

J. R. Shaw.....Canada Furniture Mfrs., Ltd., Woodstock.

Executive Committee.

George Brigden .....Brigdens, Ltd., Toronto.
C. H. Carlisle .....Goodyear Tire & Rubber Co., Ltd., Toronto.
Gordon C. Cockshutt...Slingsby Mfg. Co., Ltd., Brantford.
W. Cowan .....Cowan & Co., Ltd., Galt.
T. J. Dillon .....Canada Foundries & Forgings, Welland.
H. W. Fleury .....J. Fleury's Sons, Aurora.
E. J. Freyseng.....Freyseng Cork Co., Ltd., Toronto.
Robert Gray .....Wm. Gray & Sons Co., Ltd., Chatham.
Sam Harris .....Harris Lithographing Co., Ltd., Toronto.
Fred Hatch .....The Hatch Mfg. Co., Whitby.
Wm. Inglis .....John Inglis Co., Ltd., Toronto.
G. M. McGregor .....Ford Motor Co. of Can., Ltd., Ford.
John Millar .....Lever Bros., Ltd., Toronto.
T. F. Monypenny .....Imperial Varnish & Color Co., Ltd., Toronto.
J. F. Paige.....Pt. Arthur Shipbuilding Co., Ltd., Pt. Arthur.
Thomas Roden .....Roden Bros., Ltd., Toronto.
H. J. Waddie .....Canadian Drawn Steel Co., Ltd., Hamilton.
Sam J. Williams .....The Williams, Greene & Rome Co., Ltd., Kitchener.
A. W. White .....The George White & Sons Co., Ltd., London.
Frank Whitton .....Steel Co. of Can., Ltd., Hamilton.

Chairmen of Ontario Branches (Members Ex-Officio).

W. C. Coulter .....Booth-Coulter Copper & Brass Co., Ltd., Toronto.
Geo. H. Douglas .....Thornton & Douglas, Ltd., Hamilton.
(Note: Mr. Douglas is Division Chairman.)
E. R. Blew .....Spirella Co. of Can., Ltd., Niagara Falls.
C. H. Waterous .....Waterous Engine Works Co., Ltd., Brantford.

SUB-COMMITTEES.

Educational Committee.

George Brigden .....Brigdens, Ltd., Toronto.
E. J. Freyseng .....Freyseng Cork Co., Ltd., Toronto.
T. F. Monypenny .....Imperial Varnish & Color Co., Ltd., Toronto.
H. W. Fleury .....J. Fleury's Sons, Aurora.
G. M. McGregor .....Ford Motor Co. of Can., Ltd., Ford.
Gordon C. Cockshutt ..Slingsby Mfg. Co., Ltd., Brantford.
Frank Whitton .....Steel Co. of Can., Ltd., Hamilton.
H. J. Waddie .....Canadian Drawn Steel Co., Ltd., Hamilton.
F. R. Close.....The Duncan Lithographing Co., Ltd., Hamilton
R. C. Fearman .....F. W. Fearman Co., Ltd., Hamilton.

Legislation Committee.

Sam Harris .....Harris Lithographing Co., Ltd., Toronto.
T. F. Monypenny .....Imperial Varnish & Color Co., Ltd., Toronto.
Thos. Roden .....Roden Bros., Ltd., Toronto.
H. J. Waddie .....Canadian Drawn Steel Co., Ltd., Hamilton.
F. S. Hodgins .....The Williams, Greene & Rome Co., Ltd., Kitchener.
A. W. White .....The George White & Sons Co., Ltd., London.
C. H. Waterous .....Waterous Engine Works Co., Ltd., Brantford.
A. L. Page .....Frost Steel & Wire Co., Ltd., Hamilton.
Geo. C. Coppley .....Coppley, Noyes & Randall, Ltd., Hamilton.
George Day .....M. Beatty & Sons, Limited, Welland.

Transportation and Power Committee.

C. H. Carlisle .....Goodyear Tire & Rubber Co., Ltd., Toronto.
Gordon C. Cockshutt...Slingsby Mfg. Co., Ltd., Brantford.
W. Cowan .....Cowan & Co., Ltd., Galt.
T. J. Dillon ..... Canada Foundries & Forgings, Ltd., Welland.
Robert Gray .....Wm. Gray Sons Co., Ltd., Chatham.
Fred Hatch .....The Hatch Mfg. Co., Ltd., Whitby.
J. F. Paige .....Pt. Arthur Shipbuilding Co., Ltd., Pt. Arthur.
H. J. Waddie .....Canadian Drawn Steel Co., Ltd., Hamilton.
T. D. McFarlane .....McFarlane-Douglas Co., Ltd., Ottawa.
J. Sinclair .....The Barrie Tanning Co., Ltd., Barrie.
E. R. Blew .....Spirella Co. of Can., Ltd., Niagara Falls.
C. H. Waterous .....Waterous Engine Works Co., Ltd., Brantford.
W. R. Dunn .....International Harvester Co. of Can., Ltd., Hamilton.
F. W. Dean .....Steel Co. of Can., Ltd., The, Hamilton.
Henry Bertram .....The John Bertram & Sons Co., Ltd., Dundas.

Publicity Committee.

Geo. Brigden .....Brigdens, Ltd., Toronto.
C. H. Carlisle .....Goodyear Tire & Rubber Co., Ltd., Toronto.
Wm. Inglis .....John Inglis Co., Ltd., Toronto.
John Millar .....Lever Bros., Ltd., Toronto.
W. C. Coulter .....Booth Coulter Copper & Brass Co., Ltd., Toronto.
W. R. McNeil .....Bird & Son, Limited, Hamilton.
Russell T. Kelley .....John Bull Manufacturing Co., Hamilton.
John C. Notman .....The McKinnon Dash Co., St. Catharines.
E. Worth .....Bonner-Worth Co., Ltd., Peterboro.
Fred. H. Gray .....The Ives Modern Bedstead Co., Ltd., Cornwall.

Associate Members.

J. F. MacKay .....Willys-Overland, Ltd. (Chairman Publishing Committe), Toronto.
J. J. Gibbons .....J. J. Gibbons, Ltd. (General Advertising Agents), Toronto.

134 New Members Added

The Secretary reported that in the National Membership Campaign, the Division played a creditable part—134 members being added to the list and the campaign is being continued. The executive took up consideration of a report received from the Niagara Falls Branch, with respect to a decrease of the supply of electrical power to manufacturers in the Niagara Falls district, causing considerable changes of manufacturing methods and inconvenience to employers. It was moved by Mr. W. C. Coulter, seconded by Mr. Arthur White, and carried:

"That the Secretary issue a circular and questionnaire to the members in the Ontario Division to ascertain the extent to which they are affected by decreased supply of power and for suggestions, and further, that a representation be made to the Hydro Commission suggesting that no further contracts be entered into, until the present situation is relieved."

The matter was then referred to the Divisional Transportation and Power Committee, with powers.

The Executive resolved to make appropriate representations to Premier Drury and the Attorney-General, urging the claims of the employers to representation on the Ontario Workmen's Compensation Board.

Some Canadian Reconstruction Problems

Progress of Canada Both Agriculturally and Industrially Has Been Marvelous, but the Great Underlying Principle of Reconstruction Should Be the Creation of a Better and Improved State of Society

By SIR HENRY DRAYTON
Minister of Finance, Dominion of Canada

THE reconstruction problems of every country are diverse and many. To attempt to deal with them generally within the compass of a brief paper would be entirely impossible unless the treatment given were indeed superficial. Viewed from many aspects, the problems of reconstruction are moral rather than material. In so far as the material resources are concerned, Canada has no need for concern. Over and above all present agricultural, mining, lumbering, and fishing activities the untouched natural resources of the country remain in volume and indeed in greater volume than they have up to the present been utilized. While it is true that Canada's debt to-day stands approximately at a total of two billions of dollars with heavy resultant interest charges; while it is true that the claims of the returned soldier, costs of pensions and disability claims are heavy, and will all in the nature of things continue for many years to come, it is also true that the country and the people as a whole are infinitely better off than they ever were before.

Significance of Victory Loan

You know we have just finished in Canada our final Victory Loan drive. Our Victory Loan drives are something very similar to your Liberty Loan drives. We have had altogether six war loans. The first three we called war loans, and then we got the idea that the name Victory Loan was the proper thing, for we were almost sure it was going to be a victory, anyway, and so we started calling them the Victory Loans, and I think that perhaps what has happened in connection with this last drive is something which gives you the most recent and best evidence of what I am telling you as to Canada's position in this paper, because the success of our loans, the amount of popular support, the support from the people generally, not merely the support of the financial interests but the support of all the people to these loans has constantly increased. The first loan was a comparatively small loan. It was a new thing for Canada to try and raise money within her shores, absolutely new. She had to get money in England or in New York, chiefly in England. She was a borrowing country, and our first loan was a small one, $100,000,000, and it was approached with a great deal of fear and trembling, and now at the wind-up of the war, now that the war fervor is entirely over, at the time of the peak with a popular loan last year netting $610,000,000, this year the Canadian people have subscribed the sum of $673,000,000 for the purpose of wiping up and cleaning up Canada's war obligations, and to provide a national working capital. So I think I am safe in claiming that the country as a whole is better off than it ever was before.

It took the war to discover for us just what could be done and to realize to some extent, perhaps only to a small extent, the possibilities and greatness of the country.

To illustrate, in the year 1913 our export of foodstuffs and fodders amounted to $194,930,254, and at the close of the last fiscal year to $467,625,311. Our manufactured exports in 1913 amounted to $43,692,708, and at the end of the last fiscal year to $549,284,268.

The progress of Canada, both agriculturally and industrially, has been marvellous. But the great underlying principle of reconstruction as it appeals to us generally is rather that reconstruction which will make for a better and improved state of society as such, a reconstruction which while preserving the right of initiative and proper incentive for effort, will at the same time to the fullest extent possible afford equality of opportunity for everybody.

There is, however, a material question which in the conduct of our public business of the future I venture to think you, firstly, as presidents of life insurance companies and secondly, as American citizens, are interested in. In the first instance, as life insurance presidents I would confidently claim that you have a real interest in Canada and a constantly increasing interest. I note that in 1898 your insurance companies had in force in Canada $105,708,154; in 1908 the amount of business in force was increased to $193,087,126 and the extent of that business of later years has been much more rapidly increased, as your business in force in Canada in 1918 amounted to the large sum of $619,261,713. I think Mr. Chairman, that is an increase you would look upon with a good deal of satisfaction. Out of a total insurance in force at that time of $1,785,061,273 your companies had over one third of the total business.

Canadian Investments Sound

But not only are you interested in the volume of business but you are also interested in your Canadian assets which have grown with the growth of the business and which I am pleased to understand have formed remunerative investments. These assets in 1898 were $23,563,824; in 1908, $46,762,534; and in 1918, $98,607,188. So as insurance presidents you have a very real interest in Canada. One of the greatest aids to sound national status is that each and every citizen to the fullest extent possible should have a personal direct property interest in his country. Outside of a Canadian 5½% Victory Bond, which of course I place higher than any other security—a security of greater value not only to the citizens but to the country than any other—there is no way in which our average citizen can make his first investment easier than by investing twenty or thirty dollars in a thousand dollar policy. Life insurance indeed tends to stabilize financial and industrial conditions. It tends to, and where adopted in large measure, prevents distress and suffering and constitutes a real protection to the worker and to his dependents.

I feel that to-day we require the fullest extension, the fullest production, the greatest amount of useful work and the practice of economy and thrift everywhere. Life insurance agents are particularly at home in preaching thrift—that essential pre-requisite to national reconstruction. Personally, I well recollect that the first money I ever saved was that rendered necessary by a twenty-pay life insurance

* An address delivered at the Thirteenth Annual Meeting of the Association of Life Insurance Presidents in New York City.

policy. May your endeavors to make Canadian people money-savers be most successful.

Very intimately connected with the problem of reconstruction is the bettering of conditions of public health. This is a matter in which the insurance companies are particularly interested, and as I understand it many of you have already commenced an educational compaign amongst your policy-holders. You are in a position, with your efficient organizations, to aid very largely in propaganda for better health conditions, of which both our countries are in need. Your efforts in this regard will be doubly pleasing to you, as while bettering and aiding the living conditions generally to great national benefit you will also be securing a greater longevity in the lives insured, bettering your risks, and increasing the profits of the policy-holders and of your shareholders.

Canadians Under-Insured

There is much room for a great advance in insurance in Canada. Assuming a population of eight millions, I think it is a little under at the present moment, the life insurance in force in Canada to-day is but approximately $225 per capita. Canadians are under-insured and life insurance companies have a most useful public task ahead of them in bringing up the average protection for the families of the workers of Canada, but increased insurance like every other good thing depends upon ability to pay premiums, depends upon prosperity. I was just talking about reconstruction. I had an idea, you know—it is not altogether remiss, and I hope you won't think it is—we have done so many things together, we have had so many common undertakings in the last few years, our job has so often been a mutual job, that I do not think it will be taken amiss if I refer to something which it seems to me is not altogether a Canadian question of reconstruction, but one in which you are also interested. It, I think, can be solved properly by mutual action. While Canada is prosperous, the question of the matter of exchange between our respective countries is something that I am sure you do not view with complacency. Your insurance premiums are paid in Canadian dollars, and as a result of the trade balance existing between the countries the Canadian dollar is at the moment at a discount, and a serious discount when the value of the Canadian dollar, the prosperity and assets of the country are considered. The depreciation, while very real, is merely the effect of present trade balances and does not reflect in the slightest upon the intrinsic value of Canada's obligations. The depreciation of the Canadian currency in New York funds is simply owing to the fact that we do too much business with you and you do too little business with us.

I wonder if the extent of Canada's purchases in the United States are realized. In South America you have a whole continent, you have been doing business with that continent for many years, you have there operating trade commissions and trade representatives and, I think I may fairly say, have covered that field with characteristic American energy. Your statistics show that your total trade with all South American countries amounted for the year 1918 to the sum of $881,977,051, with a trade balance against your country of $252,859,463. In the same year your business with Canada amounted to $1,216,744,389, and it resulted in a favorable trade balance of $344,235,455 to your country. In 1919 the United States business with all South American countries was $969,276,605, the balance of trade against you again being $167,473,303. On the other hand, for the same year with Canada your total trade amounted to $1,282,677,849 and the balance of trade in your favor amounted to a sum no less than $344,768,213. With such a balance against us and with the further fact that Canada is doing some business overseas, settlement of which is ordinarily made in New York in credit instead of for cash, the reason why your Canadian premiums only net you approximately 95 cents on the dollar in New York funds is very readily apparent. While our respective countries have always very largely traded one with the other the adverse balance of trade used not to tell so heavily upon Canada. In 1910 the adverse balance was $106,888,088 and in 1915 it was $110,289,650 and at these times, of course, Canada instead of selling abroad for credit was selling overseas for cash, and the amounts of those adverse balances with your country were much more than made up by the exchange coming from overseas countries, payable to New York and going on to Canada.

That Canada is a very large purchaser in the United States and that the tendency to purchase is increasing is made very clear by the exhibit of the percentage of imports in comparison with Canada's total imports. During the fiscal year ending March 31, 1913, before the war, our imports from the United States amounted to 65,03% of the whole, but during the fiscal year ending March 31, 1919, that percentage had grown to 81.50. On the other hand, the percentage of purchases made by the United States in Canada in comparison with our total exports not only has not increased in a like ratio but has declined, as the percentage of Canadian exports to the United States in comparison with our total exports for the year ending—take the same year—March 31, 1913, was 39.27, and for the year ending March 31, 1919, while ours had increased as I stated from 65 to 81, yours dropped for the same year from the 39 plus I have given you to 37.

It may be suggested that the best way of restoring the full value to your Canadian premium would be for Canada to do less purchasing in the United States, but I have the idea that this solution of the subject is not one which would commend itself to you as American citizens. We want to do as much business as possible with you and I further have an idea you want to do as much business as possible with us. I think we all realize that two of the very necessary essentials in any proper re-establishment are firm currencies and standard exchanges. I am quite sure that you would much sooner see the exchange situation righted by additional American purchases in Canada rather than decreased Canadian purchases in the United States. Temporarily, and from time to time, these adverse balances may be easily rectified by the investment of America's large surplus reserves in Canada, and this solution is one which is probably as much in the hands of the presidents of great American companies as in anybody's. The field for investment in Canada is very large. There is still great room in Canada for development.

Reconstruction a Big Problem

You have been so kind as to ask me to speak on some Canadian problems. The problem that I am leaving with you is not alone a Canadian problem. It is a problem in which both of our countries are interested. It is a problem further which is one of the most urgent ones confronting us and one which I am confident your Association with its tremendous resources can do much in assisting to remedy. My apology for introducing it, if any apology is needed, is that it is a problem in which you as insurers of Canadian lives as well as all sellers of American goods to Canadian purchasers are deeply and vitally interested.

The problems of the North American continent will have to be worked out by our respective countries, and to an ever-increasing degree the problems of the world will be solved by your great Republic and the confederated nations of the British Empire. With a history, with laws, interests, traditions and aspirations so largely common, the essential combined effort for civilization and humanity ought to be, and I am confident will be, harmonious and effective.

Canadian Bankers Discuss Financial Aspects

Caution Needed in Approaching the Uncertainties Lying Ahead—A Testing Time is Coming, which will Try Out the Strength of Canadian Business—Ability of the Country to Meet the Situation is Assured

A SYMPOSIUM

FINANCIAL aspects of the present industrial situation are touched upon by several leading Canadian bankers in the following symposium of opinion. Running through practically all their comments is a note of caution. Up to the present time, with the strong demand for all commodities and with resultant high prices, it has been possible to conduct business along profitable lines. Inevitably, however, there must come a time when prices will begin to recede and then the strength of Canada's business and industrial undertakings will be tested. Some bankers believe that this testing time is getting near and so they urge the exercise of caution.

More than one reference is made to the immense debt which the Canadian people are now bearing, a debt exceeding two billions of dollars. To meet the interest charges on this debt as well as to provide for other obligations, which must be shouldered by the country, a very large sum of money must be provided annually. The advice proferred by the bankers is the building up of a great export trade, coupled with such extensive production at home that the necessity for importing goods will be reduced.

INEVITABLE DECLINE IN PRICES NEARER

By Sir F. Williams-Taylor

General Manager, Bank of Montreal

The economic and financial difficulties that confronted the country during the war have since changed in nature, but have not disappeared by any means. There is an aftermath of problems which Canada must face and in which bankers are vitally concerned. At present there is great trade activity; yet our national debt grows apace, with attendant ills. Therefore, even with a full measure of faith in our country, I find the near future difficult to visualize. We derive a measure of consolation in comparing our lot with that of countries worse off than our own, but contiguity and ambition direct our eyes towards that country to the south which has benefited so vastly by the war.

It is no reassuring reflection that the United States has already reduced its war debt by some $800,000,000, while we confront an increase of $600,000,000. for the current year. It seems obvious, however, that though fate has treated the two countries differently, any prosperity experienced in the United States must be reflected in Canada. Our true comfort, as well as our pride, is that the Dominion did its duty in the great war as a part of the British Empire. No Canadian would have it otherwise, and therefore we face the cost with stout hearts and the future with a watchful serenity.

The practical evidence of Canada's fortunate trade conditions lies in the fact that commercial failures for the twelve months ended 31st of October were 766, as compared with 904 for the previous corresponding period, and with 1,669 in 1912-1913.

On that outstanding subject, the high cost of living, I might state my belief that the inevitable decline in prices is at least nearer, and it is to be hoped that the delay meanwhile is not lulling dealers into the erroneous belief that the standards of these last few years will continue indefinitely. Misconception on this point would constitute a menace alike to borrower and banker. It seems certain that food prices will drop presently and that all commodities must decline in price; therefore, great care and scrutiny of credits on the part of bankers and other business men are imperative.

FUTURE OF CANADA BRIGHT WITH PROMISE

By D. C. Macarow

General Manager, Merchants Bank of Canada

He would be a pessimist, indeed, who regarded the future of Canada as otherwise than bright beyond that of almost any other country. In saying this, however, I am not unmindful of the fact that a high degree of co-operative effort will be called for if solid and enduring results are to be gained in the fullest measure. We are confronted with many and perplexing problems in the solution of which, let us hope, broad-minded counsels will avail against narrow sectionalism. The character and spirit of the Canadian people may, I believe, be depended upon with confidence in this connection.

The natural resources of the country are well-night limitless, requiring only population and capital to develop them. A rich reward awaits energy and enterprise. The country affords every enticement for American industries to establish branch plants here with all promise of satisfactory results along permanent lines.

Our rich, extensive and still low-priced farm lands in the West afford at once the opportunity and inducement for American farmers to settle upon Canada's fertile prairies. It is noted already that the tide of immigration thence, interrupted by the war, has again been resumed in large volume.

Sufficient wheat can be raised in Canada's golden West to feed not only ourselves and Great Britain, but to supply, later on, the additional quantity that the United States may, it is within the range of probability, require to import.

The banks of Canada will be found ready at every stage of the country's progress to extend the utmost support and assistance towards the fostering and development of all legitimate undertakings, whether of the forest, the field or the factory.

TOO MUCH TALK AND TOO LITTLE ACTION

By George Wilson

Assistant General Manager, Union Bank of Canada

Our two billion dollars national debt and its attendant burdens, our two hundred million dollars annual obligation for interest upon our securities and investments held abroad, our gradually waning exports, our depreciated exchange, our inflated currency and our profligate expenditures at home have been continuously dinned into our ears to the accompaniment of frenzied exhortations to produce more and consume less, to save more and to spend less, and to export more and to import less, but it cannot be gainsaid that there is not one man in a hundred who gives the slightest heed to these admonitions or warnings. What does the average wage-earner care about the H. C. L. as long as he gets 365 days' pay for 165 days' work? What concern has he in the inflation of

the currency so long as his own pockets are inflated with it? With high wages, abundant money, little unemployment, and prosperity and plenty abounding throughout the land, it is a case of "sufficient unto the day is the evil thereof," and not until the pinch of hard times comes, as it surely will if remedial measures are not soon applied, will the nation at large be brought to a proper sense of its responsibilities. The gist of it all is, that there has been too much talk and too little action, and it is really up to the captains of industry, the leaders of finance and economic experts to get together and endeavor to put into practice some of the theories they preach so eloquently. For instance, why should the splendid work performed abroad by the Trade Commission go by the board?

It has been amply demonstrated that there are markets in all the four quarters of the globe for Canadian products, but, notwithstanding that, it is universally admitted that the development of our export trade is the surest guarantee for relief from our future financial burdens, the present grand opportunity is being allowed to slip from our grasp. What was the $70,000,000 spent on our 60 ships of the Canadian mercantile marine for? Surely there must be some relation between this appropriation and our export trade!

Foreign trade credits of $100,000,000 were established by the Government for 1919 in favor of France, Belgium, Greece and Roumania, of which it is announced only $40,000,000 was availed of, not because those countries refused or did not require our goods, but, presumably, because we were too busy at home to supply them. It is true that there are divergent opinions respecting the desirability of granting foreign long-term credits, but if Canada waits until the universal shortage of essential commodities is overtaken by increased production before she reaches out for foreign markets, she will probably find that other nations have forestalled her and that the opportunity has been lost.

The present is the time to establish our goods in foreign markets, and, once established there, a permanent outlet for our surplus products is assured. A nation which shouldered the colossal financial burdens of the war should surely not be daunted by the establishment of one or two hundred million dollars of foreign credits, and securities issued against such credits with the underlying guarantees of the Dominion and foreign governments could probably be partially or wholly disposed of in the United States, where our credit stands highest of any of the foreign nations, but even if not marketable there, they could undoubtedly be absorbed at home.

If the manufacturers of Canada would emulate the example of their contemporaries in Great Britain and bring their scattered groups of industries under a co-ordinated working organization for the promotion of foreign trade, production far in excess of domestic needs would result. Under such conditions, with foreign markets waiting, the necessary financial machinery would undoubtedly soon be set in motion.

WOULD STRONGLY ADVISE CAUTION

By J. P. Pell
General Manager, Bank of Hamilton

It is with considerable hesitation that I express any opinion on the outlook in the industrial field, as there are so many abnormal factors in existence.

However, I am convinced that it is a time for caution. For several years the failures throughout Canada have been much below normal. This means that the rising prices and great demand for goods have made it possible for many who are incompetent and lacking in sufficient capital to remain in business. The time is rapidly approaching when it will require great skill in managing business to avoid heavy losses. It is a time to think twice before building extensions to plant, and enlarging facilities to take care of the more or less artificial demand.

Reports that reach us from authorities on the other side of the water show that Great Britain is settling down to her normal activities, and will soon be again sending her goods all over the world; and with the European countries like Belgium getting back into production, great changes must be expected in the business outlook; and without being unduly pessimistic, I would strongly advise caution.

THE FINANCIAL OUTLOOK AND CANADIAN INDUSTRIES

By L. D. Wilgress
Supt., Foreign Trade Department, Royal Bank of Canada

The commencement of the New Year is an opportune time to review the financial position of the country and the future outlook as related principally to the manufacturing industry.

Canadian industrial firms can assist the readjustment of the country's finances by increasing the production of articles hitherto imported from abroad and by enlarging the export trade in Canadian products. Both of these are necessary if the decrease of imports and increases of exports are to be attained, which are required to maintain a favorable balance of trade, proportionate to the annual payment of interest on the public debt and other charges which we must henceforth be prepared to meet.

The national debt of Canada has increased ever six-fold since the outbreak of the war and now exceeds $2,000,000,000. During the current year the annual interest payment on this debt will be not less than $115,000,000. In addition there are interest and deficit charges for railways taken over by the Government and increased expenses of governing, so that the total expenditure incurred during the fiscal year ending March, 1920, will probably approximate $669,000,000.

Having these circumstances in view, it is imperative that we should buy as little as possible from foreign countries of the articles which we can get along without or which can be produced in Canada. The existing premium on American funds acts as so much protection to the Canadian manufacturer and should warrant the home production in larger quantities of lines hitherto chiefly imported from the United States. Export trade should also receive careful study and energetic efforts should be put forth by Canadian manufacturers to increase the sale of our goods in the principal export markets.

Our manufacturers are at present enjoying a period of after-war prosperity. It is important that the underlying causes of this prosperity should be properly understood and that the future be gauged correctly. Otherwise the evil effects of any falling off in the home demand will be much more far-reaching.

The backbone of the country's economic fabric is agriculture, or the production of foodstuffs. The reduction of supplies from Russia and other European countries has resulted in Canadian producers of foodstuffs receiving high prices for their products. This is reflected in increased buying power and a great demand for manufactured goods. This demand is augmented by the reconstruction needs of countries more directly affected by the war and the disorganization of industry of the leading manufacturing nations of Europe. Moreover, there is a scarcity of raw mterials throughout the world. The result is that in nearly all lines of industrial products the demand greatly exceeds the available supply.

On the other hand Canadian manufacturers should anticipate a gradual recovery from the varying degrees of economic stagnation now prevailing throughout Europe. The revival of agriculture and of manufacturing industries in these countries will bring about a readjustment and a levelling of prices for which our manufacturers should be prepared.

Canada's Merchant Marine and Its Services

One of the Most Important Developments of the Past Year, the Inauguration of Ocean Services by the Government's New Merchant Marine—Reasons Why These Services Should Receive the Loyal Support of Canadian Shippers

By W. A. C.

OF prime importance among the developments of 1919 from the standpoint of the Canadian manufacturer has been the inauguration of ocean freight services by the new Canadian Government Merchant Marine. With the commissioning of the first of the vessels built for the purpose—an event which took place last May—a new era dawned for Canadian commerce. Hitherto, with but limited exceptions, the overseas trade of Canada was carried in bottoms of British or foreign register, and the growth of business was circumscribed by the obstacles imposed by such conditions. To-day the country has its own ships, manned as far as possible by Canadians, outfitted in Canadian ports and operated with the single object of developing direct trade connection between Canada and the markets of the world. In a word, the instrument is being provided by means of which Canadian manufacturers can ship their products to export markets by the most direct routes and under the most favorable conditions and, if they are to profit by the opportunity, it simply devolves upon them to take action.



In the Cuban Service

The "Canadian Trader", 3,400 tons, sailing from Halifax to Havana, Cuba

Between May and the end of the year about twenty-two of the sixty vessels ordered by the Government were handed over by the builders to the Merchant Marine, and during this year the balance will be completed. As rapidly as they are commissioned these boats are put into service on routes which have been selected as offering the best opportunities. Up to December 9th forty-six voyages were made—ten to the West Indies and Cuba; eleven to Barbadoes, Trinidad and Demerara; three to Buenos Aires; four to London; eight to Liverpool; two to other British ports; one to Bordeaux; one to Havre, and six to St. John's Nfld.

Other services have been decided upon and still others are the subject of investigation. Among the former is the service to Australia and New Zealand from Vancouver and Victoria, which was inaugurated on January 15th with the sailing of *The Canadian Importer*, a fine vessel of 8,100 tons, launched at Vancouver in December. This antipodean service will be maintained on a monthly basis, the vessels to be used on the run being the *Canadian Importer*, *Canadian Exporter*, *Canadian Inventor* and *Canadian Prospector*, all products of the Coughlan Shipyards at Vancouver. With the exception of the *Importer*, all of the vessels operating in the Australian service will be equipped with refrigerator space of 50 tons capacity, which will enable British Columbia exporters to ship fruit and fish. Those in charge of the operations of the Canadian Government Merchant Marine express themselves as being very well pleased with results to date and hopeful of the complete success of the Government's venture into the building and operating of a fleet of public-owned merchant ships. The South American service is developing nicely. At present there is a monthly service in effect between Canadian Atlantic ports and the ports of Brazil and the Argentine, the ships in commission being of 8,300 tons. As yet it has been found impossible to get full return cargoes for the Canadian market so that the ships have had to fill up goods for American ports and stop at these ports on the way north. However, in time enough business should materialize to obviate this procedure.

Ten boats are performing the West Indian service, and for the past two months no difficulty has been met with in getting full cargoes both ways. Here again there are undoubtedly excellent opportunities for an interchange of goods. So far sugar has been an important freight, something like 36,000 tons of raw sugar having been brought from Cuba to Montreal during the past season. Among other raw products being brought north for Canadian manufacturers are hemp and logwood, while manufactured goods in considerable variety are moving south. From British Columbia, four cargoes of lumber have been shipped, three to Great Britain and one to Australia. The possibilities of business through Canada's Pacific Coast ports are great and it will be the aim of the Merchant Marine to develop trade as extensively as possible, not only to render the ocean service profitable, but to provide needed traffic for the Canadian National Railways. In addition to Australian service already mentioned, a service from British Columbia ports to the west coast of South America is contemplated, and this will be inaugurated as soon as boats are available. It is also likely that a service to Japan and China will be undertaken, as trade between these countries and Canada is reaching large proportions.

There are various aspects of the shipping situation which should not be overlooked by Canadian manufacturers. As

regards the Canadian Government Merchant Marine in particular, it should be emphasized that the entire outfitting of these vessels is done in Canadian ports and with Canadian goods. In other words, these Government-owned ships are being administered to the advantage of home production. In return it is suggested that manufacturers ought to give the preference in shipping to merchant marine service thereby assisting in strengthening what should be a source of revenue to the country.

Again, it has become the custom to book business through United States houses to a great extent and agents of the Merchant Marine are constantly being referred to shipping companies in New York and elsewhere. This arrangement was all right enough when perhaps it was impossible to get adequate service otherwise, but it is now suggested that, when Canada's own vessels are operating on all the more important trade routes, it would be desirable to do business direct.

Ships on Regular Schedule

The Merchant Marine has another claim on the loyal support of Canadian exporters and importers by reason of the fact that it is aiming to perform a direct service. Its ships are running as far as possible on a regular schedule between Canada and other countries, when they might very profitably be diverted here and there wherever cargoes are offering. This adherence to fixed routes may mean loss of earnings, but it promises better service and accordingly merits the support of shippers.

Another obstacle which must be overcome is the circumstance that the fleet of ships, as compared with other fleets, has cost a lot of money, and fixed charges are high. The Canadian-built ships have cost $215 a ton. The ships of other fleets, while some may have cost as much to build, would average lower because there would be included a number of vessels built in days when costs were lower. Here again is reason for throwing all the support possible to the Canadian fleet so that the value of the ships may be written down to a level where costs will not prove so excessive.

Finally it must not be overlooked that Canada's little fleet of merchantmen is up against the formidable competition of the large fleet of the United States Shipping Board, which is aiming to do for the United States just what the Canadian Government Merchant Marine is trying to do for Canada. As against a modest 320,000 tons for Canada, the United States Shipping Board will soon be operating 12,000,000 tons. Its ships will herd on all the trade routes and, unless Canadian ships get good support, they may lose out to their more powerful competitor.

Canada has built its ocean fleet in order to ensure an outlet for its products and to obviate dependence on the shipping of other countries. It behooves both exporters and importers to make the best possible use of the means now placed in their hands for extending the trade of the country. It is a service that is needed, and now that it is provided it should receive every encouragement.

Royal Bank Enjoys Growth

Bank Celebrates Golden Jubilee by Carrying Assets Over the $500,000,000 Mark

A gain of over $100,000,000 in assets and earnings in excess of any previous year is reported by the Royal Bank of Canada for the twelve months ended November 30. The great strides made by this institution will attract all the more attention, because in some quarters it was thought that the leading banks of the country would experience some difficulty in keeping up the very high totals reached during the war period, when some very large undertakings were being carried out for the different Governments. This period of readjustment, however, does not seem to have had the slightest effect on the progress of the Royal Bank.

Of equal interest perhaps has been the manner in which the bank has been able to help the country in the expansion of its foreign trade, as it enjoyed perhaps the greatest experience of any banking institution in Canada in this particular kind of business, and on this account was able to lend the fullest assistance in the export business of the country, during the period when this has been of paramount importance.

From the public standpoint, of particular interest will be the gain in total deposits of over $80,000,000, notwithstanding the large withdrawals that must have taken place in connection with the recent Victory Loan. With the increase that has occurred during the year savings deposits of the Bank now stand at $259,465,169, as compared with $197,348,439, while deposits not bearing interest gained to $159,656,229, up from $135,243,278 a year ago.

The general statement of assets and liabilities shows that the Bank has crossed another important milestone by placing its assets across the half-billion mark, these now standing at $533,647,084, as compared with $427,512,982 in the previous year. Of this amount liquid assets are represented by $273,908,862, as against $224,982,088, while cash on hand, as represented by current coin and Dominion Notes, has gained to $55,681,547, up from $42,124,658 a year ago. The past twelve months have been noted for their business activity in all parts of the country, with the result that the total current loans of the Bank now stand at $233,834,879, as compared with $183,748,392 at the end of the previous year.

With the larger business that has been handled, the profits for the year have also shown a healthy gain and



In the South American Service

This is the "Canadian Pioneer," a ship of 8,100 tons burden, sailing from Atlantic ports to South America. This vessel is of the type of the "Raider" and "Importer," which will be inaugurating Canadian Government Merchant Marine Service to Australasia

amounted to $3,423,264, after the usual deductions and provisions, including bad debts. This was at the rate of 20.14 per cent. on the $17,000,000 of capital and was an increase of $613,418, as compared with the profits of the previous year, when the ratio was 18.7 per cent.

After deducting $2,862,602 for dividends and other appropriations, the Bank was able to add $561,057 to its Profit and Loss Account, bringing that item to $1,096,418, thus more than doubling the amount carried forward at the beginning of the year.

Assets Nearly $175,000,000

Fifty-fifth Annual Statement Reveals Significant Progress Made During Past Year

With total assets of $175,000,000, the fifty-fifth report of the Union Bank of Canada is the most notable in the history of the institution. Compared with $153,000,000 last year the Bank has added to its assets $22,000,000 which represents a gain of 14.23 per cent. within the twelve month period, a striking achievement having due regard for the vicissitudes of the reconstruction era.

Notable among the year's developments was the addition of $2,000,000 to the Reserve Fund, thus bringing the total to $5,600,000. This was made possible by the application of $1,781,170 premium from the $3,000,000 new capital stock issue and $218,830 transferred from current profits. The addition to this account brings the total reserve up to 70.28 per cent. of capital.

The Bank's liquid or quickly convertible assets are in excess of $76,000,000 compared with $72,000,000 last year and bear a percentage of 47.23 per cent. to public liabilities.

A gratifying feature of the Bank's return is the increase shown in public savings, notwithstanding heavy withdrawals for Victory Loan subscriptions. Deposits show a grand total of $135,496,514 compared with $127,242,698 a year ago. Non-interest bearing deposits actually declined from $58,805,207 a year ago to $51,119,804, but interest bearing deposits which are essentially the savings of the nation, increased by $15,939,219, or 23.29 per cent. to a total of $84,376,709. But for the wide participation in the Government loan unquestionably even larger figures would have been shown, which is direct evidence that the banking campaign based upon the national need for further thrift and economy is accomplishing much of its purpose.

Nova Scotia to Hold an International Exposition

By H. R. THOMPSON
Secretary, Maritime Division, C.M.A.

ON December 3 and 4, a Provincial Conference was held in Halifax to consider a proposal for an Old Home Summer and International Exposition for Nova Scotia. The idea originated with Horatio C. Crowell, a returned soldier who, when overseas, was impressed with the fact that Nova Scotia has not been given due publicity. Mr. Crowell placed his views before the Halifax Board of Trade, and his proposal was endorsed to such an extent that funds were furnished to make it possible for him to visit all sections of the province in an endeavor to have the scheme thoroughly discussed, and if possible, endorsed by many commercial organizations before a general conference was called to consider the proposals in deail and definitely draft the plans for carrying them out.

Early in the Conference a unanimous resolution was adopted endorsing the proposal for the "Old Home Summer and International Exposition" and a provisional committee on "Ways and Means" was appointed to draft definite recommendations for carrying out the proposals as outlined. At the last session the recommendations of this committee were submitted and adopted. In short, they were as follows:

1. That the celebration of the "Old Home Summer and International Exposition" be held in the year 1924.

2. That this Conference appoint an Executive Committee of nine members, this Committee to be trustees of any funds raised for the preliminary work of organization and to be empowered to proceed with the permanent organization of the Old Home Summer Association and International Exposition. The said Executive shall be empowered to employ secretaries and such organizers as may be deemed necessary. They are to carry out the following programme: Draw up letters of incorporation. Prepare necessary legislation propaganda and organization of financial campaign, co-operation with schools and civic bodies for arbor month, May, 1920, and such other matters as may be necessary to carry on the objects of the Association.

3. That the Executive Committee shall be composed of certain gentlemen which were named.

4. That certain gentlemen be appointed to act as conveners of county meetings for the purpose of organization, and that J. F. Masters and R. E. Johnson act as conveners for the New England States and that Miss C. Carmichael, Provincial President for National Council of Women, be Convener for Women's Organizations.

5. That the Executive Committee, together with representatives from the Provincial Exhibition Commission, shall be instructed by this Conference to enquire into all matters relating to International Fairs, devise ways and means for financing the project, confer with the Provincial Exhibition Commission, and report back to the Conference at a date to be determined by the Executive.

6. That the sum of $25,000 be raised by popular subscription for preliminary organization expenses and that the Victory Loan and other organizations be employed for the purpose of collecting the same.

The "Old Home Summer" feature is intended to stem the tide of immigration and to call back on a visit at least some of the former residents of the Province in an endeavor to re-interest them in the land of their birth.

The "International Exposition" will be held at Halifax and is intended as a means towards world-wide publicity and of attracting the attention of commercial interests which have not had a suitable opportunity for studying the possibilities for the favorable investment of capital in the development of the resources of Nova Scotia.

An effort is being made to extend the "Old Home Summer" feature to include New Brunswick and Prince Edward Island, and it has also been suggested that an exhaustive survey be made of the resources of the Maritimes and that an industrial tour be organized to give the visitors an opportunity to study the conditions at first hand.

Among the speakers at the Conference were the Lieutenant-Governor of Nova Scotia; Hon. G. H. Murray, Premier of Nova Scotia; Mayor Simpson, of Dartmouth; Horatio C. Crowell; F. G. J. Comeau; John F. Masters, Vice-president American-British Federation, Boston; R. E. Johnson, ex-President Intercolonial Club, Boston; H. R. Thompson, Secretary Maritime Division, C.M.A.; R. U. Parker, G.P.A., Dominion Atlantic Railway; D. W. Johnson, Director of Publicity, Ottawa, and K. H. Smith, Chief Engineer N.S. and N.B. Water Power Commission.

A Review of Industrial Conditions in Canada

The views of a large number of leading Canadian manufacturers on the state of Industry in 1919 and the Outlook for 1920.

IN the following pages there appear, grouped as systematically as possible according to the different lines of industry, the comments of upwards of two hundred Canadian manufacturers on conditions which have prevailed in the field of industry during the year just closed, together with a forecast of what the present year has in store. These views have been received in response to a request sent out by INDUSTRIAL CANADA in December and are representative of all the principal manufacturing industries of the Dominion. In some few cases the writers have requested that their names be withheld, but the large majority of the contributions to the symposium appear under the names of the manufacturers who have prepared them.

It will be found, in reading through the various reviews, that there is a good deal of unanimity of opinion among manufacturers on certain basic conditions. Thus on the question of labor, it is generally reported that skilled labor has been very scarce and even unskilled labor in short supply. Average efficiency apparently has declined and output has not been maintained on a proportionate scale to the pre-war period. At the same time some improvement over 1918 was noted in various quarters in the matter of labor supply, with better conditions as affecting the relations between employer and employee. The raw material situation has also been a serious factor and at the end of the year was quite as bad as ever. It is at once the cause and the outcome of the high prices which have characterized business during 1919.

Market conditions have been wonderfully strong, with a persistent demand, particularly during the latter half of the year, for practically all the products of industry. This has made selling easy, while the shortage of goods has put obstacles in the way of ready buying. The call has been for quality goods, a feature which is commented upon by many manufacturers and given as one reason for the present high cost of living. The strength of the home market has been detrimental to the promotion of export trade, which has also been handicapped by the unfavorable state of international exchange.

On the outlook, there is unanimity of belief in a continuance of strong and active markets for some time to come. Commentators, however, are averse to prophesying very far in advance and content themselves with expressing confidence in the state of business for 1920. Beyond that there is uncertainty and a note of c a u t i o n is sounded as to the desirability of not extending manufacturing capacity too far under the stimulus of present abnormal conditions.

The Outlook for Canada's Steel Industry

CANADA'S steel industry has weathered the difficulties of the transition period remarkably well. The outlook at the end of the war was none too hopeful, with munition business at an end and no pronounced rush for construction materials. However, as the year advanced, business began to develop on substantial lines and the strike in the United States, throwing orders to Canadian mills, had a very stimulating effect on the industry. The outlook is hopeful, and the steel men who contribute to the following symposium are all optimistic as to the future. New lines are being undertaken and the industry as a whole is being developed along broad lines.



Immense Coke Ovens of the Dominion Iron and Steel Co., at Sydney, N.S.

DEMAND FOR STEEL GROWS GRADUALLY

By Mark Workman

President, Dominion Steel Corporation, Limited, Montreal

Production conditions have been affected very slightly in the steel industry by shortage of labor. There has on occasion arisen a shortage of common labor, but the effect has not been material. The supplies of raw materials used by our company, that is, coal, iron ore and limestone, are owned and controlled by ourselves. We are, herefore, at all times in an excellent position as regards basic supplies. Operating conditions have on the whole been normal, and no unusual conditions have arisen.

The demand for steel during the past year has grown gradually. Had it not been for the industrial unrest in the United States culminating in many strikes, I think it would be fair to assume that the volume of business for 1919 would have been rather more than the last normal pre-war year.

The effect of the situation in the States has been to create a serious shortage of steel in that country. This shortage has been estimated at between three to four million tons. My best information is that the leading interest has experienced a shortage of about two million tons by reason of strikes.

The effect on the Canadian steel market has been felt in many lines, such as Canada has been in a position to produce or on which they had a stock available for immediate shipment. These stocks were picked up very quickly by American buyers, who have been in Canada for the past month.

It is recognized, of course, that this is merely passing business. It cannot be regarded as permanent, and we have not found any great desire on the part of American purchasers to buy for more than about one month ahead. As I have already stated, however, they have cleaned up a great many stocks of the Canadian mills. With regard to new lines, I might say that our company has entered into the manufacture of small rails, that is to say, rails of weights under 60 pounds per yard. You will understand, of course, that we have been operating a mill for several years for the production of rails 60 pounds per yard and heavier. Our company has been exporting various products practically since its inception. We are particularly well situated for export trade, but we do not know that any important development is to be expected in the export market. We have, of course, every expectation that the business will continue.

There is no doubt that the elimination of Germany and Belgium, perhaps only temporarily as competitors, may make a greater demand for steel for export now than there will be when these countries and France as well are producing steel more nearly comparative with their pre-war tonnage. But when conditions were normal we were exporting steel, and we cannot see any reason why it should not continue. Then again it may be that these countries coming back into their own, as it were, will make the competition even harder than it was before.

We believe we will be able to export steel at all times from Sydney by reason of our favorable location on the Atlantic seaboard, and by using our own vessels, which enable us to ship directly from our own works, eliminating freight hauls to the seaboard which are necessary in the case of most of our competitors.

So much has been written on the outlook for the steel industry in Canada, that I am somewhat reluctant to say more than that I believe that the steel industry in Canada is still in its infancy. I feel that all that is necessary for a large development of the manufacture of steel in this country is confidence, fresh vision that we may build up for the future and amicable relations between employer and employee.

GOOD DEMAND FOR ALL LINES OF STEEL

By Robert Hobson

President, Steel Co. of Canada, Limited, Hamilton

The supply of labor during the past year has been very satisfactory. We have had no difficulty in getting our regular supply of raw materials until the coal strike started

on the 1st November. Operating conditions in general, considering the disorganization which took place during the years of the war, have been fairly satisfactory. At our Swansea Works, Toronto, our men were out in sympathy with the Metal Trades strike.

During the first months of the year, trade fell off with us somewhat, but has been picking up well during the later months of the year. It is quite as good now as it was during the last period of the war. I refer now to steel for ordinary commercial purposes. We have a very good demand for practically all the lines of goods that we manufacture. The effect of the United States steel strike was to cause some concerns who largely purchase in the United States, to come to us for assistance.

We have made no new developments to speak of during the year at our plants beyond replacing some older types of machines by new ones of up-to-date design.

We have done a fair amount of export business during the year, but we have been handicapped considerably by the high rates of water freights and to the rates of exchange. During the last few months it has kept us fairly busy looking after our domestic trade.

I am decidedly optimistic as to the future of the Canadian steel industry, both for the immediate future and for the next two or three years.

ALGOMA STEEL PLANT BRANCHING OUT

By W. C. Franz

President, Algoma Steel Corporation, Limited

We have had no difficulties as to production being affected by labor supply or supply of raw materials, and our operating conditions have been favorable; the only reason for curtailed production in the past twelve months has been lack of orders.

There was not much demand for steel this year up to sixty days ago, but at the present time the demand compares favorably with that of the last period of the war. All lines both iron and steel, are in request. The U.S. steel companies supplied quite a large tonnage, both iron and steel, in Canada, and the effect of the strike has, of course, increased the Canadian demand upon our products. Further, we have sold some of our products in the States, principally due to the U.S. steel strike.

We have branched out in our production, the most important of which is the manufacture of structural steel shapes up to 15-inch beams and channels. We are also producing an alloy steel of different kinds, and find quite a demand for this product.

On account of our location, we do not contemplate being much interested in export business. During the past year we sold some steel rails to Belgium, which were shipped by way of Montreal. We do not expect to develop any large export trade.

In my opinion, the future of the Canadian steel industry is looking better to-day than at any time in the past, and with the natural growth of the country there is a great opportunity for enlargement of all steel plants, and an increase in production. This, I think, applies to the immediate future and the more remote future.

OPERATING MILLS TO FULL CAPACITY

By Arch. McColl

Secretary, N. S. Steel & Coal Co., Limited, New Glasgow

Demand for steel fell off materially after the war. In the last period of the war, and in fact for the greater part of the war period, we were very busily engaged in the manufacture of steel for munition purposes. This demand, of course, was cut off completely, and while we were comparatively busy during the first quarter of 1919, the second quarter saw a large falling off in orders; and the third quarter was practically stagnant, and our blast furnaces and open hearth plant were shut down for relining and repairs. In the fourth quarter the demand for steel products has improved and we are now operating our mills at New Glasgow to their full capacity; a large part of our plant, however, being adapted principally to the manufacture of material for car-building, has, owing to the scarcity of business, been closed down for the past six months, and so far no demand for cars is yet in sight. The effect of the

(*Continued on page* 244.)

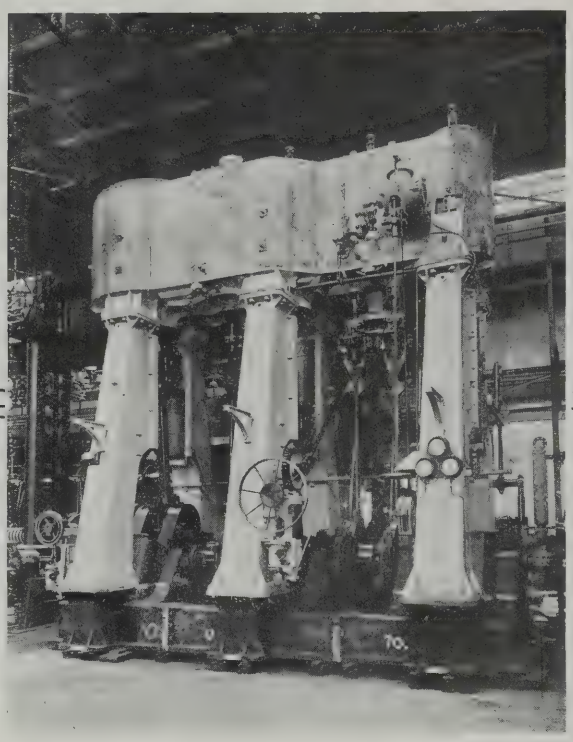


Another View of the Dominion Iron and Steel Co.'s Coke Ovens, showing Pusher and Pusher Track.

This photo and the One on the previous page by courtesy of Iron and Steel of Canada.

The Machinery and Metal Industries

IN the wide field of industrial activity represented by the above heading, there has necessarily been a considerable variety of experience during the past year. Common enough to all industries has been the shortage of skilled help and the difficulties and delays incident to the securing of raw materials. These conditions have, of course, been more serious in those special industries which have been experiencing an increased demand for their product. Other industries report a falling-off in demand, since the end of the war and in consequence they have not felt the labor and material shortage to such an extent. On the whole, however, business has been satisfactory and the outlook is regarded as favorable. With building being gradually resumed on a more extensive scale and with enlargement of industrial capacity on all hands, there will be better opportunities for the sale of machinery and equipment and a larger consumption of those metal products which form the raw material of so many industrial processes.



Triple Expansion Marine Engine, Built in a Canadian Engine Works

Photo by courtesy Canadian Vickers, Limited

PRODUCTION GETTING BACK TO NORMAL

By H. J. Waddie

President and Manager, Canadian Drawn Steel Co., Ltd., Hamilton

Our experience during the past year or more has been rather trying owing to the following conditions: First, the difficulty of securing adequate labor, and steady labor; Second, the great shortage in raw materials; Third, the shortage of transportation facilities. These three conditions have considerably reduced our output, but we are now getting back to normal. The demand for our products has been very great and we have been quite unable to cope with it. Even with additional labor, the shortage of raw material would interfere with any material increase. Values have an upward trend at present, and must continue as long as wages, freight rates, rates of exchange, etc., continue to advance.

INTRODUCING NEW LINES

By D. W. Robb

Vice-President, Robb Engineering Works, Limited, Amherst, N.S.

Labor has advanced in all lines of our work, namely, machinists, foundrymen, boilermakers, patternmakers, etc., about 20 per cent. during the past year, and fully a third since 1915. We are now working eight hours per day, forty-eight hour week, so that our overtime costs more and, while we have not had any serious labor troubles or disputes, we find there has been considerable disturbance and a tendency to do less work per hour than there was previously.

In our raw materials, consisting of pig iron, boiler plates and other materials of that class, we have had and are having considerable difficulty in getting a sufficient supply, and the prices are very much higher than they were and there does not seem to be any tendency to come down.

Our output increased during the war, due to the manufacture of shells and other war materials, but now that we are getting back to the original lines of work, we find some difficulty in securing sufficient orders to keep us busy, and our output is considerably reduced. We are endeavoring to introduce some new lines of manufacture, including the production of a farm tractor for kerosene burning, and we hope by degrees to bring up output to normal output or increase it, and eventually to get into the export trade in some of the lines.

The hopeful signs in regard to the future, are: That there is a great deal more money in circulation and capital available, both for old and new industries in Canada, than there was before the war, and there is a shortage of a great many commodities, especially food stuffs, all over the world, which is bound to keep up production and increase it for some time to come.

The unfavorable signs are the disturbing conditions of labor and the uncertainty as to the outcome of new investments. We hope, however, that by degrees these difficulties may be overcome, before there is any serious re-action.

HOISTING AND MATERIAL-HANDLING EQUIPMENT

By Geo. Day

M. Beatty & Sons, Limited, Welland

In common with everyone else, we had difficulty in keeping our men satisfied during the war, and immediately after, but by paying them top wages and a bonus, where the nature of the work permitted it, and by taking them into our counsel to some extent, we got along without any difficulty.

Raw materials were difficult to get, but did show a tendency to become easier, until lately. At the moment it is not any too easy to get delivery of necessary raw materials.

General operating conditions to-day are better in some ways than they were, that is labor is a little more tractable, but materials are not quite so easy to get. We did increase our output during the calendar year of 1918 and the first

half of 1919, due to our having long-time contracts for ship winches for the United States Government and French ships, but our production is down again now, due to the fact that no public works of any moment, outside of the Hydro power development at Chippawa, are being pushed.

The demand for hoisting and material-handling equipment, which is the class of machinery we build, is quite poor, due to the reason before mentioned, i.e., that not enough harbor work, canal work, etc., is being done to keep us busy. Values, we feel, are not going to decline; we tried our best to make a reduction in the selling price of our product, but we soon found that it could not be done without loss. Materials seem to be on the upward trend, and it is not likely that labor will be satisfied with less than they are receiving now. We have done nothing whatever in the export field proper.

So far as we are concerned we think the next three or four months at least are going to be slow. The winter time with us is generally a busy one, as usually we have contracts in hand for a dredge or some other big installation which occupies us fully. Just at the moment though, there is nothing of this sort in hand, and unless the Government decides to go on with the Welland Canal, and some other projects, it looks as though that phase of our business would be slack for some time hence.

What we would like to see is a decision to go on with these waterways, both the Welland and the St. Lawrence, and so afford work to a great number of men, and also make provision against recurrence of the trouole we are now experiencing. Money spent in utilizing the power now going to waste on the St. Lawrence, looks to us to be so obvious a thing to do that there should be no discussion about it.

CONDITIONS IN BRITISH COLUMBIA

By J. R. Duncan

Vulcan Iron Works, Limited, Vancouver, B.C.

Conditions on the Coast, from a labor standpoint, have considerably improved. The sympathetic strike which took place in Vancouver in June, seemed to clear the air, but our best advice is that whilst there is no apparent discontent on the surface there is an insidious propaganda being carried on.

Raw materials have been hard to get, and the lack of water transportation from the eastern sea-board has made us dependent entirely on the railroads. We have increased our output considerably during the year, and, as above indicated, our general operating conditions at the present time are fairly equable. We have still a good demand for our lines, and the outlook for the coming year is satisfactory. We find a tendency to accept steel commodities on the present market basis, the consumer evidently having made up his mind that the possibility of cheap steel is not obvious in the near future.

The Dominion and Provincial Governments both have committed themselves to spend large sums of money on necessary development work. Our business is expanding, and, whilst not enlarging our plant, we lose no opportunity to discard old machinery and replace same with the most effective for our class of work. We have introduced the manufacture of pulp mill machinery, such as digesters, evaporators, rotaries, etc., and lines which were heretofore imported from the United States we are making in Vancouver on a strictly competitive basis.

I have just given you these random thoughts, and if you purpose making use of them, you can co-ordinate same to suit yourselves.

BIG DEMAND FOR HEATING APPARATUS

By A. S. Capwell

Canadian Blower & Forge Co., Limited, Kitchener

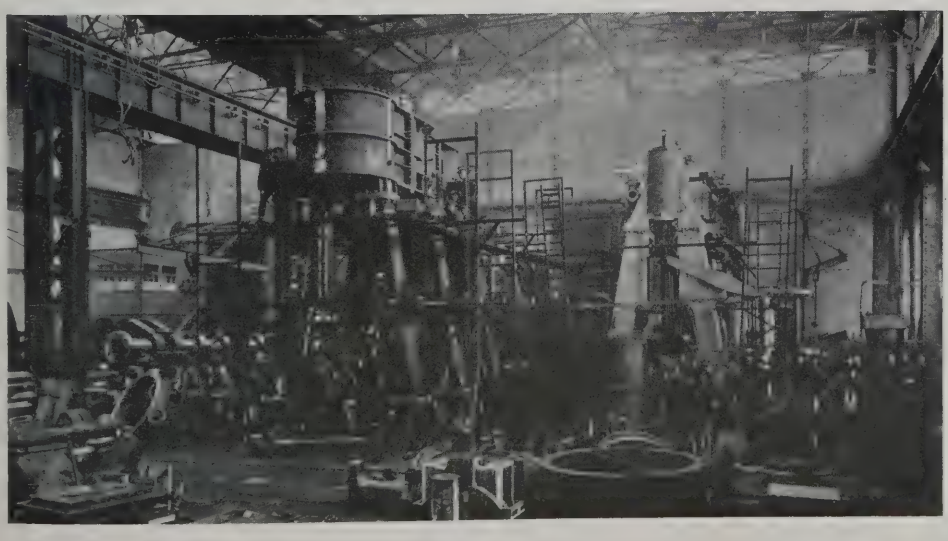
We find a scarcity of skilled labor for general machine work, and are obliged to depend on inexperienced labor to a large extent.

In our process of manufacture, we use a great deal of sheet steel, and small structural shapes, all of which we have to bring from the U.S.; consequently we have had material on order for a number of months on which we have been unable to secure delivery.

We were engaged in the manufacture of munitions, and increased the capacity of our plant for this work, so that we have been adding to our line in order to provide additional output to take care of the increased manufacturing facilities. This has meant the addition of new machines, and a general increase all along the line.

We have endeavored to keep our prices on the same level as they have been for the past year, but have been obliged to increase in some lines, owing to increased labor and manufacturing cost. As to demand, we are extremely busy and have more orders on our books than at any time for

(*Continued on page* 294.)



Scene in a Canadian Machinery Manufacturing Plant, Showing Marine Engines Being Assembled.

Photo by courtesy Canadian Vickers, Limited, Montreal

Agricultural Implements and Tractors

SHORTAGE of materials and high wages are tending to restrict output and keep up cost of production in the agricultural implement manufacturing industry. These are two factors which are being stressed at present by manufacturers. The lack of materials was becoming a serious matter towards the year-end, aggravated as it was by strikes in the steel and coal industries of the United States. That the situation might become even worse was the opinion of some. So far as the supply and efficiency of labor is concerned, most reports agree in stating that skilled labor is short, while the average of efficiency is lower. Taking all conditions into account, there is no likelihood of any early decline in the price of the finished product.



Assembling Grain Drill Discs in a Canadian Implement Factory

The domestic market has been fairly active, though several manufacturers point out that the high prices are restricting purchases to cases of absolute necessity, and that a drop in prices would undoubtedly stimulate a big buying movement. In the export field, steady improvement is observable, though the serious condition of exchange in many foreign countries may tend to halt export business.

The tractor industry grows in importance with the increasing use of their source of power on the farm. Several new tractor manufacturing industries have been established, and their report is that the outlook for business is favorable. Tariff uncertainties, however, are hampering production in some cases, particularly where competition with the cheaper type of American tractors is encountered.

The experience and opinions of several Canadian manufacturers follow:

GENERAL REVIEW OF IMPLEMENT INDUSTRY

By Chas. L. Wisner
2nd Vice-President, Massey-Harris Co., Ltd., Toronto

Our experience with regard to the various manufacturing conditions the past season has been that the labor situation remains difficult. There is a distinct shortage of men in certain trades, notably the iron moulding trade. The general expenses of operating a factory have, contrary to our expectations, increased rather than decreased, and the whole situation at present points to a more expensive operating condition for 1920 than for 1919.

Production has not been increased and the present output per man does not compare favorably with similar output in pre-war times. Up to about two years ago our factories worked fifty-nine hours per week. About two years ago we established the Saturday half-holiday to apply the year around, and also reduced our factory working hours to nine hours per day—this made a fifty-hour week. Last summer we put our factories on a forty-eight-hour per week basis. In this readjustment of hours there was also a readjustment of piece-work prices and day rates so as to enable the workmen to have the same earning power as they had over the longer working period per week, and it was our hope that the shorter working hours would inspire the men to a little greater effort and that in some degree they would increase production to in a measure overtake the loss of the extra working hours. Our hopes in this direction have not been realized.

There is no change as regards the kinds and qualities of implements for which we have a demand. Prices are remaining at an uncomfortably high level. We had hoped that production costs would begin to show sign of decrease, but from information which we have at the present time regarding 1919 production costs, it would seem as though 1920 prices will have to go still higher. The marketing conditions, so far as Canadian trade are concerned, have not changed in any degree.

Export business has not ceased to be a factor with us even during the four-year war period. Of course our export trade was much restricted during the war, because of the cutting off of business relations with enemy countries where in pre-war times we had enjoyed a large and profitable trade. There is no immediate prospect of resuming business relations with the Central European countries. There is a great demand for our products in the foreign fields and we should look forward to a very satisfactory volume of business in Britain, France, Italy, and the Scandinavian countries were it not for the difficulty that is now cropping up with regard to exchange. We fear that depreciation in the value of foreign currency as compared with the dollar, will have a very serious effect upon our ability to keep up our export business.

In Australia the harvest is an absolute failure. This will mean that largely the stocks which we shipped there for this year's harvest will be carried forward and will result in our having practically nothing to manufacture for that trade for next season.

In the Argentine our information is that for the present the harvest outlook is satisfactory. Should this be the case, a nice clean-up of machinery supplies will doubtless result, and we will hope for substantial estimates from that market for the following season's business. The actual results, however, of the Argentine situation will not be known until the 1st of January.

The outlook, so far as our ability to produce goods is concerned, is satisfactory, providing we had less difficulty in

securing raw materials. Three months' ago we would have expressed the opinion that supplies of steel and other raw materials were going to be easier to secure and that prices were likely to work somewhat lower, but the effect of the steel strike, and later the coal strike, has had a very serious affect on the outlook for the immediate future, and all the indications at the present time point to greater difficulties in securing our raw materials and in a substantially increased cost of both these basic materials and all items of factory expense which enter largely into the cost of our production.

All this is naturally a great disappointment to us as, frankly, the very high cost of agricultural machinery at the present time is an obstacle in the way of doing a satisfactory business, and we have been very anxious to see some signs of reducing operating expenses and production costs so that we could in turn reduce our selling prices, which we know would have the immediate affect of increasing our volume of business, but unfortunately there is nothing in sight at the present to indicate anything but still higher prices for next year.

OUTLOOK FOR DOMESTIC TRADE GOOD

By J. E. Ruby

General Manager, Frost & Wood Co., Ltd., Smith's Falls

In our experience raw materials were more readily obtained, and except in a few of the skilled trades, such as tool makers and moulders, labor was readily obtainable; as a consequence manufacturing operations were carried on with more comfort than during war years.

In Eastern Canada farmers purchased more freely than they did in 1918, when there was a general tendency to defer purchasing in the expectation of a reduction in prices; in Western Canada the light crop had its effect on the sale of harvesting and haying goods in which we are largely interested; our volume of sales throughout Canada showed an increase of 10 to 15 per cent., but our export trade, due to unsettled conditions, following the war, showed quite a marked decrease from the previous season.

Despite increased cost for both raw material and labor, implement manufacturers generally made no advance in prices to consumers during 1919 over the 1918 figures, except an amount sufficient to cover the increased freight rates which were put into effect; there was a marked tendency on the part of consumers to purchase as far as possible labor-saving machines.

Export trade shows little, if any, signs of improvement, nor do we anticipate any change in this respect until conditions become more stabilized throughout Europe, and more particularly until foreign exchange rates are stabilized. The outlook for domestic trade is good for the coming season, but we think present manufacturing facilities are quite adequate to take care of the demand, especially in view of the situation with respect to foreign trade.

OUTLOOK FOR TRACTORS GOOD

By F. R. Bartlett

General Manager, Chase Tractors Corp., Ltd., Toronto

We have just started into the manufacture of agricultural implements during the past year and regret to say that I cannot give you an intelligent answer that would be of any value to the questions asked. However, I will give you what I can. Throughout our various industries we have had no trouble whatsoever regarding labor, material and general operations, with, perhaps, the exception of coal and coke. We expect some difficulty with those above-mentioned two this winter. Those of our industries which we can compare with last year show a marked increase in output compared with a year ago.

Export business has not yet become a factor, but we can say that the development of it looks very promising. Our outlook on the whole situation is very optimistic. We cannot see how the demand can do other than increase for some time to come, and we doubt if the manufacturing facilities will be adequate to keep pace with it. We are enlarging one of our factories in Galt and are contemplating a large addition to our big plant here in Toronto.

OUTLOOK PROMISING FOR NEW YEAR

By Thos. B. Christie

Works Manager, Sawyer-Massey Co., Limited, Hamilton

We find the labor situation in such a condition that it is very difficult to procure skilled mechanics in almost every line of work. There is apparently no scarcity of handy men, and if you have sufficient work of repetition character, it is quite possible to educate these men to do that work. The raw material situation is in a very serious condition, due largely to the steel and coal strike, which has been inter-



Woodworking Department in Implemen Plant, showing the assembling of seeder boxes.

Photo bycourtesy of International Harvester Co. af Canada, Limited.

fering in a general way with all classes of material either directly or indirectly. In as far as our own business is concerned our production has been increased, but not to any appreciable extent during the past year.

We find exceptionally good demand for all of the lines of machinery that we manufacture at the present time, probably due to the fact that nearly all concerns are more or less affected by the labor conditions and therefore are unable to supply the goods, and naturally everybody is making inquiries from every available source of supply.

Our export business has considerably increased during the past year and is developing as rapidly as we can take care of it.

In as far as our own work is concerned, the outlook looks promising for 1920. We believe that we will be able to dispose of all goods that we can manufacture. In fact at the present time, with the programme that we have laid out for 1920, we believe that we have sufficient to take care of us until about the end of August, 1920. We are not anticipating any additions to either plant or equipment at the present time.

OUTPUT SOMEWHAT GREATER LAST YEAR

By Jas. Hamilton

The Peter Hamilton Co., Limited, Peterborough

In connection with a great many other machinery firms in Ontario, we had quite a long strike with our moulders last summer which kept our work back to a great extent. We really did not have any other labor trouble to speak of. Raw materials have come in promptly until this last month or two. Production has been increased to some extent, and our output at the present time is somewhat greater than it was a year ago.

There is no doubt but that the introduction of the tractor will change the types of plows and cultivators used, but we do not think it will affect other implements very much. Taking into consideration the advances which have been made recently in lumber, steel, iron and everything else which goes into the manufacture of implements, we do not consider that any decrease in prices is justified.

The export business has never been much of a factor with us, but we have not as yet reached the same volume in export business that we had previous to the war.

It is pretty hard to size up the outlook just at present. There is no doubt the farmer is looking for lower prices, and with him lower prices mean a radical reduction. It is true, we do not think the average farmer has been buying as many implements the last three or four years as he did previously, so that there should be a real need for them and an increased demand, but whether this will develop this year or not, it is pretty hard to say. We have no doubt that not only ourselves, but other implement firms will be able, with present equipment, to handle the increased demand. We have no present plans for factory enlargement.

FACILITIES BEING TAXED TO LIMIT

By M. Moody & Sons Co.

Our experience in manufacturing in 1919 has been satisfactory to a certain extent, namely, we have had sufficient labor, but we have not been satisfied with delivery of raw material, and in general operations. Our production during the year has not been increased to any extent. There was a greater demand for harvesting machines than seeding machines. This evidently was caused by a very wet fall in 1918 which interfered with ploughing, so that the farmers did not buy a great quantity of seeding machines for spring in 1919.

We have not yet entered the export business, as all our goods are sold in Canada.

The outlook is very good indeed; the demand is likely to keep up and manufacturing facilities are taxed to their utmost. We have last fall enlarged our wood-working department, and in the spring of 1920 we intend enlarging our foundry to almost double its capacity. From what information we can gather the agricultural industry will be very healthy for quite a few years.

DEMAND FOR IMPLEMENTS ON INCREASE

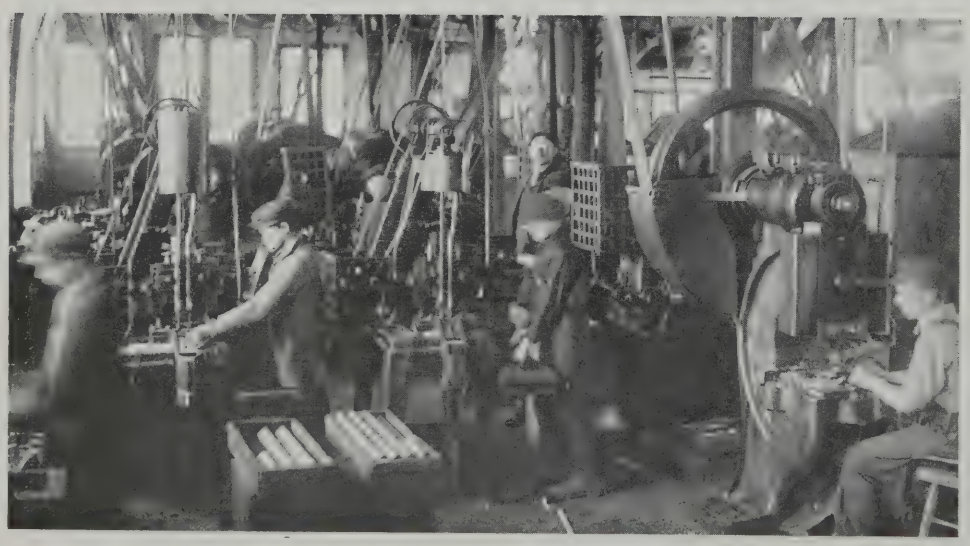
By Arthur W. White

Manager, The George White & Sons Co., Limited, London.

There has been, and still continues to be, considerable industrial unrest. We find very little difficulty, however, with our labor. We find deliveries of raw materials very slow from the U.S. and we have to purchase a large amount of our raw material in the U.S. as it is not made in Canada. Coal and steel strikes have aggravated this situation.

Demand in Canada is increasing. The tendency is to raise prices, but in our opinion it is very wise for all manu-

(*Continued on page* 244.)



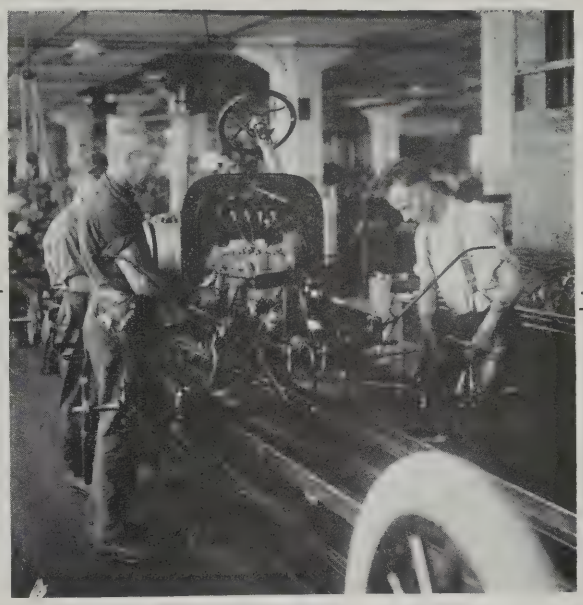
View in the Knife and Bar Department of Implement Factory, showing operations on section and ledger plates.

This photograph is also furnished by courtesy of International Harvester Co. of Canada, Limited.

Canada's Automobile Industry Grows

EXPANSION has been the keynote of the automobile manufacturing industry during the past year. Repressed to a certain extent during the war years, the moment that restrictions on production were lifted, plans formulated to increase capacity were at once put into effect and are to-day beginning to bear fruit in greatly enlarged output.

Manufacturing conditions in this particular industry have been somewhat variable. From one quarter comes the report that both the supply of labor and of materials has been satisfactory; from another that labor has been inefficient and supplies difficult to procure. It is probably safe to say that the same difficulties which have beset other lines of industry have been felt by the manufacturers of automobiles. Gratifying indeed is the evidence given that the industry in general is becoming more and more self-contained through the steadily increasing production of Made in Canada parts. The reproach that Canadian plants were largely engaged in the assembly of American made parts is being rapidly removed and more than one company is now practically manufacturing all-Canadian cars.



Assembling a Car in a Canadian Automobile Factory

Photo by courtesy
Ford Motor Co. of Canada, Limited

The market for cars has been extremely active and it is believed that the demand will be strong throughout 1920. The opinion is expressed that, owing to the scarcity of raw materials, it will be impossible for manufacturers to keep up with the demand. Predictions are also made that export trade will become an important factor.

Appended are a number of comments supplied by manufacturers of automobiles and motor trucks:

INCREASE PLANT CAPACITY 100 PER CENT.

By R. S. McLaughlin

President, General Motors of Canada, Limited, Oshawa.

Our experience as regards labor during 1919 is that it has been sufficient and efficient. With the exception of two or three varieties, the supply of raw materials has been quite satisfactory.

With regard to the manufacture of parts, we have developed very decidedly. This year we put up two units of what will eventually be a very large plant in Walkerville, each 600 x 150 ft. The style name of the company is Canadian Products Limited, and is a division of General Motors of Canada. In these plants we are now manufacturing engines and are getting ready just as fast as we can to manufacture axles, transmissions, and other important parts which we have heretofore been importing. Canadian manufacturers of materials necessary to go into engines, axles, and transmissions are co-operating very heartily and satisfactorily. We are very pleased indeed with the progress we have made so far.

Production last year has been increased about 20 per cent., and would have been increased very much more had it not been for the extraordinary and absolutely unfavorable conditions which existed during the early part of the year owing to war conditions previous to Nov. 18th, 1918.

We have experienced a very heavy demand for all varieties of cars of our manufacture, including McLaughlin, Chevrolet, and Oldsmobile. Export business has not been a factor to date, but there is every indication that it will be a very large one in the immediate future. The demand in Canada appears to be unabated. Outside of minor changes and improvements, present types will be continued.

The capacity of our plants here in Oshawa by the first of the year will be increased over last year by at least 100 per cent., as we have put up three very large modern buildings and have added very considerably to the capacity of some of our older plants.

OPERATIONS DELAYED BY LACK OF MATERIAL

By T. A. Russell

President, Willys-Overland, Limited, West Toronto

It is somewhat difficult to answer your questionnaire, owing to the fact that a year ago this country was entirely engaged in manufacturing munitions and was using its whole plant for that work. As a result we have really no data of a comparative nature between the two years. In a general way I might state, however, that our experience of the supply and efficiency of labor is about the same as it was last year, and that was none too satisfactory. The same position applies to the quality and supply of raw material. Supplies are extremely difficult to obtain, and operations are being delayed owing to the inability to secure some essential raw material. We are planning to manufacture the greater part of the cars in Canada, and a very large proportion in our own plant. The market conditions continue good, and as yet in advance of the supply.

AIM TO PRODUCE ENTIRELY CANADIAN CAR

By W. M. Gray

Vice-President, Gray-Dort Motors Limited, Chatham

The labor supply during 1919 has been stringent at times, but, due to our location, we have been successful in combating it. In so far as the efficiency of the labor is concerned, it

has been rather poor, due to the fact that it is almost entirely green help and has had to be trained to our particular purposes.

The quantity of raw materials has been curtailed; shipments have lagged behind and production has been seriously affected on that account. The quality also has been generally lower. The general operation of our plant has been difficult in so far as attempting to maintain our schedule, this being due to the fact that we were trying to increase our production and at the same time recover from war conditions.

We have developed to quite an extent the manufacturing of parts in our own plant, and have put on an exceptionally aggressive plan, in so far as getting our parts made in Canada. We have endeavored at every possible turn, to interest Canadian manufacturers in adapting these parts which we now import, going so far as to communicate with them and endeavor to interest them in regard to getting blue prints, engineering data, etc., and arranging to give them a special contract which gives them exceptionally favorable conditions. We have in view, that within a period of twenty-four months, our car shall be an entirely Canadian-made product; there may be a few little accessories imported, but nothing to amount to anything.

Production in 1919 was not increased to any extent, in fact it remained just about the same as the previous year, and we considered ourselves fortunate in getting away with it. Our present output is two and a half times our last year's capacity, and we are making even larger plans for the following year.

Market conditions are extremely brisk. There has been a remarkable demand for our product, but whether it is due to our popularity in price and covers only our class, the writer is unable to state. He does feel that of course a certain amount of it is due to our name and brand. On the other hand there seems to be a general condition that the market is quite favorable towards automobiles generally. The price tendencies are towards a further increase, and automobiles will be higher before they are sold at a lower price. The large demand for automobiles runs between $1,000 and $2,000.

The outlook is extremely serious this coming year, due to the steel and coal strikes which have been in progress, which makes it hard for us to get materials and get back on a basis where we can keep up production. The demand will be far in excess of the quantity of cars manufactured this year. The types of cars will run between the four-cylinder and the six-cylinder; the multiplicity of cylinders having been discontinued to a large extent, on the market, and the general tendency being for the average person to-day, to wish to buy a four-cylinder car, and those that wish to go in for a little more luxury, sometimes are buying six-cylinder cars, but the average commercial business car to-day is along the four-cylinder line, more than it has been in the past five years.

We have just taken over the entire building and plant of the Wm. Gray-Sons-Campbell Company, which gives a floor space almost twice our present size, and is enlarging our capacity double. Our plants operate on an eight-hour basis, and it is our intention to continue so to do. We have been running on that basis for the past year and a half, and have found it very successful with our men, being appreciated by them, and giving good results.

DEVELOP MANUFACTURE OF PARTS

By Jas. L. Acker

National Steel Car Co., Limited, Hamilton

We have found it very difficult during the year to get good mechanics. There has been a very noticeable shortage of good machinists, tool makers, and jig makers. There has also been a considerable shortage in raw materials and the quality is not up to the standard. As a result general operations have been considerably retarded owing to the fact that we have been unable to get good mechanics and raw materials.

We have developed to a considerable extent the manufacture of parts in our own plant, and we are buying Canadian-made parts, where and whenever it is possible to obtain same. We have in view manufacturing our own parts to a greater extent as soon as it is possible to do so. Our production has been increased quite considerably during the year and our present output, as compared with a year ago, is increased fully 300 per cent.

The demand has been fair for our class of motor trucks, and we have been able to produce up to the demand. Price tendencies are upward. Up to the present time we have not gone after motor truck export business, but we have received

(*Continued on page* 248.)

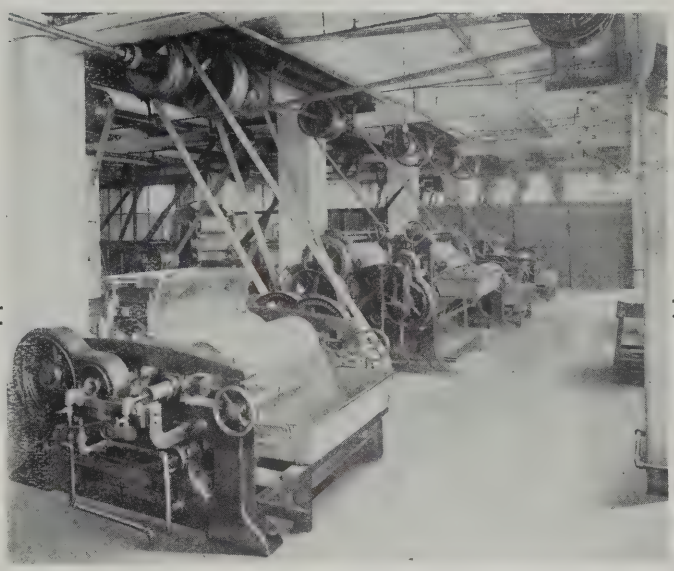


An interesting scene in an automobile factory, showing how cars are passed along from man to man during the process of assembling.

Photo by courtesy of General Motors of Canada, Limited

The Biscuit and Confectionery Industry

CONDITIONS in the biscuit and confectionery manufacturing industry, which are elaborated in the following reports from a number of manufacturers, were never more active than at the present time. The important factor has been the heavy export demand which has given a large opening for surplus output. Concurrently with strong markets both at home and overseas, there have been serious obstacles to production both in the way of scarcity of help in factories and shortage of raw materials. This has led in some cases to a forced curtailment of export shipments. So great has been the demand for confectionery, however, that factory enlargements have been quite general and more are contemplated. Practically all manufacturers unite in the opinion that 1920 will prove a busy year, with demand well maintained.



Chocolate Refining Machines in a Canadian Confectionery Plant

A GENERAL REVIEW OF THE INDUSTRY

By F. W. Bean

Bean & Westlake, Limited, Woodstock

The past year has been a most exceptional one in biscuit and confectionery manufacturing in Canada. The British market has been open to take Canadian confectionery in almost any quantity. The home demand has been abnormally large. These two factors, added to the shortage and unrest in labor, together with scarcity of materials and troubles in transportation, have kept the production man on the alert all the time in his efforts to give satisfactory service.

The keen demand at home and abroad has been a great incentive to greater production. Factories have been enlarged, more machinery installed, and generally speaking, the production has probably been the largest in the history of the country. Girl labor has been the one great drawback. In the past four years women have been utilized to such a great extent in so many new callings that confectionery and biscuit manufacturers, almost without exception, have been unable to secure sufficient of this class of help. This has tended to eliminate hand work, and to stimulate machine production.

A remarkable feature of this year's business has been the insistent demand for high-class goods. Quality, rather than price, has been the deciding factor. In fact, the market for cheaper grades of biscuits and confectionery has been almost a negligible quantity. This demand has not been confined to the high-class city trade, but has been as steady in the rural communities as in the industrial districts. The four years' war in Europe, and the consequent cessation of manufacturing in the belligerent countries, has created almost an insatiable demand there for confectionery, and particularly, for high-grade chocolates. This has been especially true of Great Britain, although in France and the Scandinavian countries much Canadian and American export business has been done. A decade ago, Canadian chocolates were not in the first-class, but great strides have been made in the industry in the last few years, with the result that to-day Canadian chocolates are recognized as among the world's best. The re-establishment of British factories will no doubt tend to curtail export from this continent, but it is felt that the intrinsic merit of Canadian goods will continue to command a fair trade, both in Britain and throughout the world.

The year 1920 is looked forward to with the most optimistic feelings by the Canadian biscuit and confectionery manufacturers. It is felt that there will be no diminution of the export demand during the coming twelve months, and that the general prosperity of this country will guarantee ever-increasing home markets. The majority of factories have enlarged their capacity. The floor space of our own plant has been increased twenty per cent., and new machinery added to a like extent. We also propose to further increase the machine production another twenty per cent. this year. By the end of the year, the additions made and contemplated in Canadian factories should be sufficient to meet the requirements of the home market, but this condition will only exist when foreign production has assumed something like normal proportions.

DEMAND FOR CONFECTIONERY INCREASES

By Jas. W. Moir

President, Moirs Limited, Halifax, N.S.

The general manufacturing conditions during the past few years have made factory management a strenuous and difficult task. Raw materials have been scarce, difficult to procure and sometimes some materials were unobtainable. Labor has been scarce and most unsettled. Notwithstanding, our production has been constantly increasing for a number of years, and is now greater than a year ago. With regard to marketing conditions, the demand for the higher-priced and more expensive goods has increased, while the demand for the ordinary qualities and cheaper lines has not increased.

Our export trade has been mostly confined to Newfoundland and Great Britain. Our Newfoundland business has increased during the past few years. In 1914, shortly after the start of the war, we sent a man to England to introduce our

chocolate confectionery. He met with instant success, and from that time until the present, we have been making constant and considerable shipments to England and Scotland, except during some rather long periods, in which we were unable to procure transportation. We believe we were the first Canadian confectioners to make a success in the English market.

We think the outlook in the confectionery business is fairly good. The demand appears to be increasing. The manufacturing facilities in different parts of Canada are being enlarged, and if these capacities do not become too great for the demand, we think the business should remain fairly satisfactory. We have been thinking of factory enlargement, but owing to present high cost of building we have not up to this date decided on any definite plan in this respect.

Regarding our own operations, our biscuit business is not very large, and is confined mostly to Nova Scotia. We ship our high-class chocolate confectionery, which is our chief specialty, to all parts of Canada, and are doing a good business in this line in every province of the Dominion, and in Newfoundland and England. The demand for these goods (our chocolate confectionery) is greater than we can supply with our present facilities.

INCREASED PRODUCTION MATERIALLY

By H. N. Cowan

President, The Cowan Co., Limited, Toronto

Early in 1919 we had some trouble with our girls. Perhaps we were not paying them enough, although we were paying as high wages as other factories employing girls doing similar work. We raised our wages and have made two advances since. We are now paying high wages throughout our factory and we are certain that our work people are contented. Prices for all raw materials have steadily advanced during the year, and we are inclined to think we may still see higher prices in 1920, particularly for sugar.

We increased our production in 1919 very considerably over 1918, and our output was greater. Of course we have added very considerably to our plant, but taking this into consideration the increased production is very satisfactory.

There is an increasing demand for goods of the best quality and we are turning out practically no cheap quality goods at all. We are getting good prices and can sell more than we can produce. We are doing some export business, most of it with the old country. We could do more if we could produce the goods.

We look for a big business in 1920, both in Canada and for export. We think the export demand will likely keep up for at least a year. We are building a very large addition to our factory, which, when equipped, will enable us to nearly double our output.

We are manufacturers of cocoa and chocolate and solid chocolate confections. We do not make confectionery or candy. We consider cocoa and chocolate to be very necessary foods and the demands for them is steadily increasing. Even if we have hard times in this country, as Mr. Drury predicts, and we do not agree with him, we do not think it will affect our business seriously, because, cocoa and chocolate are necessities, not luxuries.

STEADY DEMAND FOR QUALITY GOODS

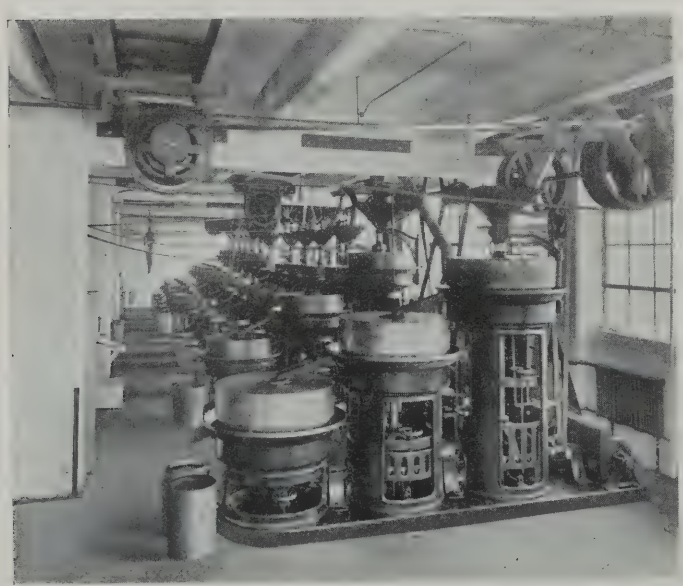
By T. W. McFarland

President, D. S. Perrin & Co., Limited, London

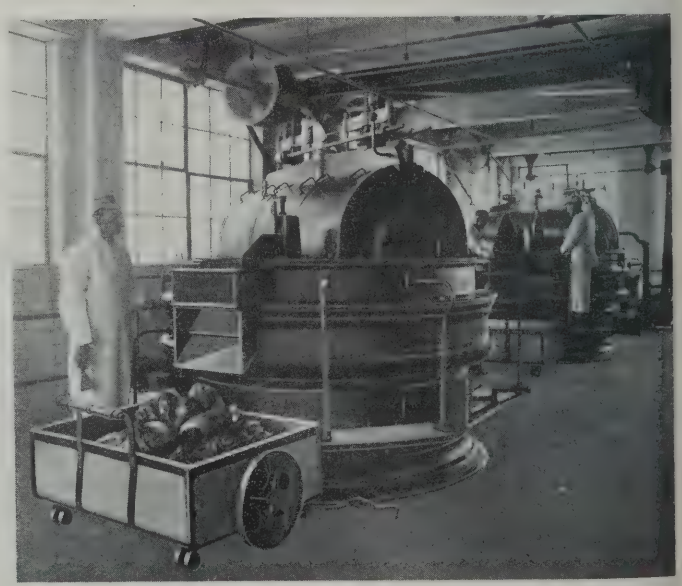
Conditions as regards labor supply in London have not been very satisfactory. It has been impossible to secure sufficient and satisfactory female help. Our own factory's requirements have been short for the last three months, of over a hundred girls. It is judged that the city is approximately short of about 1,000 girl help in the factories. Male help can be had, but of a very indifferent quality. Skilled help is not procurable, and the claim that there can be just as much goods produced in a shorter day is nonsense. Our experience has been that in cutting off one hour of our day, we have a full hour less output. Raw materials have been very difficult to procure in many instances, and we can only get them at a very much advanced figure.

Production has increased over 1918, which in our business was a very poor year, owing to the Food Board's restrictions. The confectionery part of our business shows an increase over 1918, though only slightly over our output for 1917. Biscuits, however, show a considerable increase this year over both 1917 and 1918, largely caused by concentrating

(*Continued on page* 262.)



Triple Mills for Grinding Cocoa Beans



Mixing or "Melangeur" Machines

Photos by courtesy
The Cowan Co., Limited

The Boot and Shoe Industry in Review



View in the Welt Department of a Canadian Boot and Shoe Factory

THERE is a good deal of unanimity in the reports of boot and shoe manufacturers regarding conditions in this particular line of industry. Apparently considerable difficulty has been experienced all over the country in procuring skilled help. Ordinary labor has been in better supply. As for raw materials the general report is that these have been scarce in quantity and high in price, though in some quarters an improvement over the preceding year has been felt. Production has been considerably increased both through more active operation of plants and by an enlargement of capacity on the part of several companies. This development has resulted from the strong demand for boots and shoes which has seemingly exceeded the ability of manufacturers to meet. Not only has the demand been keen in the domestic field, but it has also been very active in the export market, and several companies have been doing an active business overseas. To this export demand is attributed a large part of the high costs now prevailing in the industry.

Manufacturers are reporting a demand for goods of the best quality. The people want the best grades of boots and shoes, and seem to be prepared to pay any price for them. This is a feature of the present situation. So far as the outlook is concerned, some uncertainty is expressed, though most manufacturers look for continued strength and activity throughout 1920. Here and there a note of warning is sounded relative to possible over-production through too great an extension of capacity, and mention is also made of tariff uncertainties. Both of these factors should be watched carefully.

INCREASE IN PRODUCTION REPORTED

By A. A. Armbrust

The Lady Belle Shoe Co., Limited, Kitchener

Manufacturing conditions have been somewhat abnormal and conditions vary from time to time. The labor question is serious, as it is difficult to get experienced help. During the winter months more laborers will probably be available. Raw stock is high in price and will possibly continue so for some months in the finer lines. Material, however, is not of a high standard due to inexperienced help. In general it would appear that conditions are on a fair way to readjustment.

There has been a decided increase in production so far as our line in concerned. We are practically 100 per cent. ahead of a year ago as our factory is running as near to capacity as it is possible to obtain help. The demand for good shoes is greater than it was a few years ago and the public are realizing that it is as well to buy quality as style. The writer is also of the opinion that the demand for the coming season will be equally large. We have booked a number of export orders, but find it difficult to get sufficient labor to fill orders promptly. There is no question as to the scarcity of materials in the devastated European countries, but we have found that the buyers for overseas are not so ready to do business as formerly. This is possibly due to the extreme high prices, the matter of exchange being an outstanding feature, and also as to the ability of Germany to produce for export. However, the writer feels that if the Canadian manufacturers can get the European trade for a time, they will be able to keep it.

FINDS LABOR SERIOUS FACTOR

By J. Daoust

Daoust, Lalonde & Co., Ltd., Montreal

The labor situation is not very encouraging to the manufacturer, as we have to advance wages mostly every week, so as to avoid strikes or lock-outs. Girl help is hard to get. Raw materials are not so hard to get as they were in July or August.

As to production, we are not producing any more shoes than last year, but we are producing more leather through an extension to our plant. The reduction of hours of labor has had the effect of reducing the output and consequently, in order to maintain the same output, we had to employ more people.

There is a big demand for shoes, but the demand is mostly on high-grade shoes. There does not seem to be much demand in medium and low grade shoes. Export business has been certainly a factor in keeping factories busy, but the exchange situation is paralyzing altogether this export business, and if there is no improvement, the export trade will be killed. The outlook for domestic demand is good, as apparently stocks were depleted and our salesmen are doing very well. We do not contemplate enlarging our plants, as the export trade is too uncertain. We do not see that the price of shoes could come down when labor is asking increases all the time. At the same time, we believe that the future outlook is pretty bright and the country is generally prosperous.

DEMAND FOR SHOES IS LARGE

By J. E. Warrington

The John Ritchie Co., Ltd., Quebec

Skilled labor, such as is required in the manufacture of our product, has been extremely scarce and production has been held back about 25 per cent. on this account. Wages, of course, have increased considerably as is general throughout the country. Raw materials have not only been



Section of fitting room in a Canadian boot and shoe factory, showing bright and roomy character of the accommodation provided for the workers.

Photo by courtesy Tetrault Shoe Mfg. Co.

high in price, but deliveries are considerably behind the date specified, which has caused considerable delay in filling our own contracts. Production with us has increased about 60 per cent. compared with a year ago, due to a large extent by an enlargement in capacity.

In the market for boots and shoes, the demand is larger than at any time in our experience. There has also been a noticeable demand for better quality footwear than in former years, and while prices have been higher than ever before during the past nine months, it has not been a question of price, but of ability to get the goods. In fact, shoes could be sold for almost any price you wish to ask if you had them for immediate shipment. Consequently, market conditions in general, from a selling standpoint, have been exceptionally good.

There is no question, that, taking the export business for both the United States and Canada together, it has been a factor in not only high prices, but also the demand that has been created due to the shortage of materials and manufactured products.

We look for continued good business and high prices during 1920, in fact, expect to be able to sell more than we can produce, and in spite of increasing our capacity last year more than 60 per cent., we have under construction another large wing which will give us an increase in 1920 of about 50 per cent. over this year's production.

OUTPUT GETTING MORE NEARLY NORMAL

By F. S. Scott

Getty & Scott, Limited, Galt

We have found a general improvement in labor, and the supply of raw materials and machinery. Our production today is more nearly normal than it has been for four years, and we have increased output by about 25 per cent. over last year.

We note no change in general demand as regards quality. The trade are buying our best grades, and prices remain high. Export has been quite a factor in our trade, large orders having been received for England and the continent.

We feel that there is a good deal of uncertainty as to the future. The export market, while it may continue for a year or two on the present basis, is rather uncertain. Added to this, the uncertainty which exists in connection with the tariff will cause manufacturers to go slow in the matter of extensions.

In a general way we find the labor situation to be considerably improved. We have no great difficulty in getting all the help we want, with the exception of female labor. Our production at the present time is governed entirely by this class of help and there is a great scarcity of girls as factory operatives.

SKILLED LABOR REPORTED AS SCARCE

By G. H. Ansley

Perth Shoe Co., Ltd., Perth

We have a reasonable amount of unskilled labor offered us, but we have very great difficulty in obtaining skilled labor, or operators for any branch. Raw materials are scarce and it is almost impossible to buy the grades we require. Deliveries are slow and prices extremely high and firm. We are finding it difficult to keep up to capacity on account of non-delivery of machines, parts, lasts, and almost impossibility of obtaining skilled operators.

Production in our factory has been greatly increased, in comparison with a year ago and our output now is one-third more. We have added an extension of 40 feet to this plant and a third storey, giving us a factory 250 feet by 40 feet, three stories, and a capacity of 1,000 pairs a day, which we cannot reach, for reasons already outlined.

Demand has been greater than we can fill; quality is the demand from us. Prices are of necessity advancing because of increased prices in all raw material and every detail of shoe-making. Marketing conditions are fair with us. We are not exporting direct, but we are manufacturing shoes for concerns that we believe are exporting shoes. The outstanding feature is a different line of models and different detail in shoe-making than those we use for Canadian trade.

The outlook for production and distribution is very uncertain. Undoubtedly, there is at present a strong demand for footwear. Undoubtedly most factories are running to capacity of machines and operators, but an increased supply and better delivery of machines and lasts would enable us to teach operators more quickly, and thereby enable us to increase our production. We are using instructors throughout the factory teaching green help.

The outlook for the next few months is centred in producing orders already accepted. Further than completing our already accepted orders, we are not soliciting further business. The outlook for six months' ahead is absolutely too uncertain. The future raw material market is an unknown quantity. We have the opinion that prices will be firm and little chance for decrease in costs in any department.

My own judgment is that it would be policy to go slowly and not book any orders without having the raw material on

hand, and a very careful study of the possibilities of delivery of orders which, as pointed out above, is governed by increased efficiency through machines, lasts, and operators. To-day, and for the past three months, there has been no difficulty in obtaining business. We manufacture women's high-grade goodyear-welted footwear exclusively, and I believe are the only factory in Canada so specializing.

GREATEST DEMAND EVER EXPERIENCED

By Albert Tetrault

Tetrault Shoe Mfg. Co., Limited, Montreal

Labor has been reasonable and fairly considerate of the employer, as a whole, and we can say that conditions in our own industry in Montreal have been as satisfactory as anywhere in America. This does not mean that the shoe workers of Montreal did not get sufficient advances in their scale of wages, but that these advances were made on a basis of mutual concessions.

We cannot say that there has not been enough raw materials to meet the demand, but rather a scarcity of specially desired materials at certain given times. Conditions are slowly getting normal.

Manufacturers ordering machinery have had to wait many months before getting deliveries. General war conditions as to deliveries still apply as the demand has been unusual for new machinery on account of the necessity of larger plants and equipment to keep volume. Daily ratio of production for each machine has been less.

Our own production has been increased by 100 per cent. in a year's time, and will be again increased over another 100 per cent. by March 1st next. We figure our own progress on that score to be altogether out of proportion when compared to the boot and shoe industry in general. Despite this much greater capacity and production, we are sold until June 1st. Of course the reason of this enlargement of our capacity is on account of acquiring another plant with a capacity of about 85 per cent. as much as our original plant.

To this new plant we have built an addition, adding about another 115 per cent. capacity of original plant, making total additions to original plant capacities during the year of between 200 per cent. to 220 per cent., our capacity rising from about 2,700 pairs daily to about 8,000 pairs.

We are experiencing by far the greatest demand for Canadian boots and shoes that ever existed. Shoes are also following the general trend in all articles for better quality and manufacturers are striving and succeeding partly in meeting that demand. Prices of course are sky high, but mainly the result of higher cost of raw materials, but it is a well-known fact that Canadian prices have not advanced as much as American prices.

Though export business has been comparatively very satisfactory, we know that it has not been a factor, as very few firms have had an export policy or export sales organization. Export business is considered by most manufacturers as a source of all kinds of troubles, which they are not willing to tackle. We are rightly considered the largest exporters of boots and shoes in Canada but we must state that our export business has not been 10 per cent. of our total sales.

We believe that with present enlargements, the shoe factories of Canada, for the present, are well able to take care of the demand. We are going to import still less shoes from the United States unless too drastic lower revisions of tariff are made, as in practically all lines Canadian manufacturers can supply the customers' demands. There is no doubt that the average quality of shoes made in Canada is much superior to that of 1914's production. Our plans for enlargements of factories are at present complete, and it will now be up to our own sales force to keep factories running 100 per cent. We feel that for the next six months the retailers will be faced with the hard problem of getting deliveries in time of lines in demand. There is no doubt that it will be a question of having the goods, not of their price. After this period we do not care to prophesy, but we firmly believe that the boot and shoe industry will at least follow Canada's prosperity.

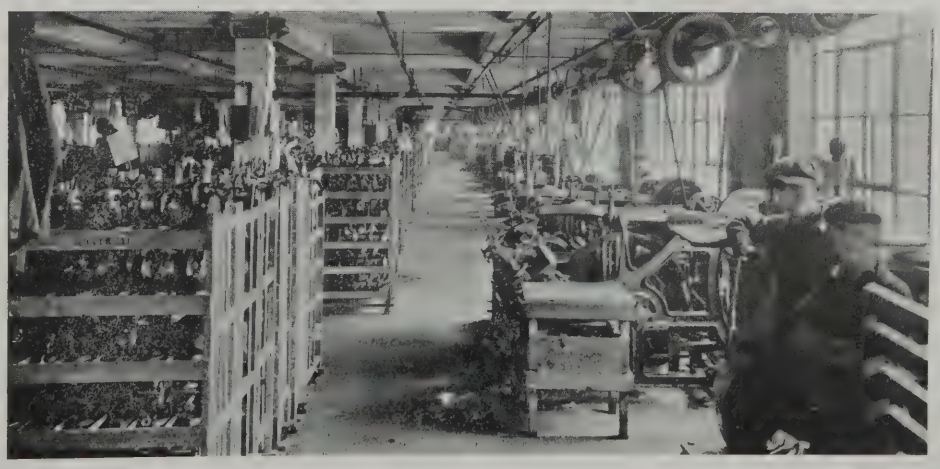
DEMAND AND HIGH PRICES TO CONTINUE

By Maritime Manufacturer

While there has been more labor available during 1919 than during the war, at the same time there is no surplus, particularly in skilled help, and wages have advanced very materially during the past year and are still advancing. In raw materials there has been a considerable scarcity of high-grade leathers, particularly upper leathers. This condition still obtains. Prices of raw materials in leathers have advanced tremendously during the past year. While deliveries of new machinery are slow, at the same time we have not experienced any great amount of difficulty in procuring what we have required in that line. The cost of power on account of increased prices of coal and labor prices has advanced somewhat during the past year. As to general operations we might say that wages of all kinds, from one end of our business to the other, have advanced very materially, and the cost of doing business has been very much increased thereby. Export business has not been a factor with us and we

Section of bottoming department in a Canadian boot and shoe factory, showing extent of capacity provided for this operation.

Photo by courtesy Tetrault Shoe Mfg. Co.



would hardly look forward to it ever being much of a factor in our business on account of the exclusive high-grade quality of shoes that we are making. While undoubtedly there would be some foreign demand for our class of shoes, we do not think the demand would be large enough to ever amount to a great deal. If we were making a medium or lower-priced line we think the foreign demand would be very much larger and the opportunities of doing export business very much greater.

As far as we can size up the whole situation, there will not be any decline in prices on our grade of shoes, as we do not anticipate leathers decreasing to any extent within the next few months. Indeed, in some lines, it is stated by some leather manufacturers, that their prices may soon be slightly higher. We do not look for any lower labor costs, in fact they may be slightly increased. As to distribution and demand in general for our product, we would anticipate as good demand for the next few months or year, as there has been during the past year at least, and if business conditions remain settled and normal throughout the country, our business should show a reasonable increase for the next year.

With regard to output, we may say that the number of pairs that we are making to-day is not nearly as large as it was in pre-war days, probably about 75 per cent. to 80 per cent. as large. The volume in dollars, however, on account of the increased prices of stock, etc., has been very materially increased. As to further factory enlargement, we would hardly feel safe in going ahead with any enlargement at the present time, until at least, such time as tariff conditions in Canada become settled, and we can look forward with reasonable assurance to the continuance, for a number of years, of settled tariff conditions.

Statistics of the Boot and Shoe Industry

Compiled by Dominion Bureau of Statistics for year 1918.

Capital invested (152 establishments)	**$31,493,152**
Land, buildings and fixtures	**5,306,982**
Machinery and tools	**3,313,338**
Materials on hand, stocks, etc.	**14,829,317**
Cash, accounts and bills receivable	**8,043,515**
Employees on salaries—1,065 males; 381 females.	
Salaries paid	**$2,037,529**
Employees on wages—6,760 males; 4,128 females.	
Wages paid	**$6,787,760**
Cost of raw and part. manufactured materials	**$25,227,448**
Leather of all kinds	**18,009,401**
Supplies of all kinds	**7,218,047**
Value of production for year	**$43,332,932**

CONDITIONS BECOMING MORE FAVOURABLE

By Geo. A. Blachford

Blachford Shoe Mfg. Co., Limited, Toronto

During the year just closed our experience as regards labor has shown an improvement. While in our particular line it seems to be impossible to obtain experienced operators on the major machines, still we have succeeded in getting a better class of unskilled labor to teach which we were unable to do previous to 1919.

In the matter of materials, there has been no difficulty in making purchases if one wanted to pay the price, but deliveries have not been all that could be desired and, while during this year we have not been materially inconvenienced through slowness of deliveries, our supplies in certain commodities have been run very close. There has been considerable delay in getting machinery, and at this present time, we have two important machines on order since last June which are still undelivered. One of them we understand is about to be shipped, and the other one may be shipped some time.

In the matter of production a marked increase has taken place as far as we personally are concerned, and from what we hear we think an improvement in this matter has also taken place in other factories, but to what extent we cannot say. The first six months of the year our production was low, improvement starting to show itself the latter part of August, since when our output has shown an increase pretty nearly every week. We took on some additional space last summer which helped the situation, but the fact that we could get people to teach and finally become producers, has been most responsible for this improvement.

The past year has seen a very severe upward movement in the price of footwear commodities with a demand so heavy that we have been unable to keep up with it. Increased prices have apparently had little detriment to purchasing and the trade have continued to demand the very best grades procurable. Domestic marketing conditions have been very easy, and we understand in several instances travellers have had to refuse business, being unable to take care of all that was offered. In our particular instance export business has not been a factor. We have done a small export trade, which, while it has not been a factor, has, however, been of benefit to us inasmuch as the export orders have called for materials and shapes which worked towards a larger production which perhaps we could not have obtained on strictly domestic business.

It is practically impossible to deal with the outlook intelligently. Things are happening to-day that we did not think of yesterday, and we loathe to give very much of our opinion as to the future, because conditions may arise which would be entirely contrary to what we might expect from conditions at this time of writing. Personally, we feel that the next few months may produce a condition whereby the demand for footwear can be met more reasonably on time. The general condition in the world's markets for leather and hides is very uncertain and, of course, just how this develops will have a great deal of bearing on the shoe manufacturing industry and what that development will be we cannot say.

QUALITY GOODS ARE IN DEMAND

By D. Marsh

The Wm. A. Marsh Co., Limited, Quebec

Our experience during the year has been that labor of the skilled variety has been scarce in certain branches of the factory. This, however, is now being overcome to some extent by breaking in new help, but is being offset very largely by the increased capacity which a number of local manufacturers are adding to their factories. On the whole, however, so far as our particular factory is concerned, labor conditions are better than they were a year ago.

Raw materials have advanced very materially in price and some classes are out of the market almost entirely, which has necessitated our abandoning certain lines of shoes and concentrating our efforts on the lines for which materials were available.

Our production has increased very materially over that of a year ago. We would not say that this is general in the trade in Quebec, as our production of a year ago was considerably below normal owing to particular circumstances in our own factory, and our output at present is probably 75

(*Continued on page* 264)

The Canning and Preserving Industries



Sorting Peas in a Canadian Canning Factory

Photo by courtesy Dominion Canners, Limited

SUMMARIZING results for the past year, it may be said that production averaged up about to normal, while demand for all packs continued strong. The cost of operation was heavy, and there is apparently little prospect of any decline in price for some time to come. Export demand has been very heavy, though it is pointed out by one manufacturer that this condition is likely to be only temporary, and that Canadian products may be driven out by the more cheaply produced vegetables and fruits of Italy, when the situation in Europe returns to normal. In the meantime the outlook is very favorable for 1920.

OUTLOOK FOR THE JAM INDUSTRY

By J. Wagstaffe

Wagstaffe, Limited, Hamilton

Our opinion is that jams will be higher next season on account of sugar being higher, farmers asking from 15 to 25 per cent. more for their fruit, labor being higher, and general working expenses all through being higher.

Domestic trade is good, also export trade. Export trade would be better, were it not that exchange is against us at the present time.

We are enlarging our plant about 40 per cent., this being the second addition that we have put on this season.

Generally speaking, the outlook for the next twelve months for the jam business is very favorable.

OUTLOOK IN CANNING INDUSTRY GOOD

By W. R. Drynan

Secretary-Treasurer, Dominion Canners Limited, Toronto

This past year our supplies have been fairly satisfactory, though labor has not been as efficient as it used to be. We have no complaint to make regarding the quality of our raw materials. Our production in 1919 exceeded the previous year on tomatoes and corn, but was less on peas and fruits.

Government regulations have tended to restrict trade and increase costs, though on the other hand some regulations have been beneficial. We have found that demand has been good both for domestic and export requirements, with supply not up to the demand. Shipping facilities on the whole have been quite satisfactory and better than the previous year.

The trend of prices has been higher and must continue high for another year at least, as all of our future contracts for supplies, which we necessarily must make at this season, are at prices not lower than last year and in a number of instances higher.

The outlook is good, provided conditions continue as at present, though we do not look for any marked expansion. Export trade will probably tend to fall off. We do not anticipate any difficulty in securing supplies of raw materials.

REVIEW OF CONDITIONS IN CANNING INDUSTRY

By Hon. E. D. Smith

E. D. Smith & Son Limited, Winona

In the canning business we seldom or ever have efficiency of labor. It is a seasonal business, and by the time we require our help every available man, for many years past, who is an efficient workman, has already secured a permanent job, and so the canner has to content himself with carrying, at great expense, a few absolutely essential men throughout the year, doing his best to try to find some work for them in the off season, and then for the balance take what help he can get which is sure to be inefficient, and so the canner has no easy task at any time. At times like these, when restlessness is more than usually prevalent, the canner

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State of the Dairying Industry in Canada



Interior of a Canadian Cheese Factory, showing the Presses and Curd in the Sinks

By J. A. RUDDICK
Dairy Commissioner, Ottawa

THE improvement of transportation and storage facilities during the past 15 years has brought dairy products into the field of international commerce, and it follows, therefore, that the situation in Canada is affected very materially by the conditions which prevail in other countries. Prices are no longer governed by local conditions, but rather by the general demand and the world's total supply.

In order to arrive at a clear understanding of the position of the Canadian dairying industry at the present moment it will be necessary to review very briefly the international situation as it was in pre-war days, during the war, and as it exists to-day.

Down to 1914 the United Kingdom was the principal world's market for dairy products, importing every year, under normal conditions, more than twice as much as all the rest of the world combined. The following figures show the imports of butter and cheese in 1913 as compared with 1918:

IMPORTS INTO THE UNITED KINGDOM.

	1913. Cwts.	1918. Cwts.
Butter	4,139,022	1,614,625
Cheese	2,297,579	2,357,822

Before the war Denmark exported 200,000,000 pounds of creamery butter annually, most of which went to the United Kingdom. During the early part of 1919 Denmark was barely making sufficient butter to supply her own people. There has been a decrease in the number of cows and a great shortage of the concentrated feeding stuffs on which the Danish farmers rely so largely. Further, the manufacture of margarine had ceased in Denmark owing to the impossibility of securing supplies of raw materials. Production has increased in Denmark during the past season and they are now exporting relatively small quantities to Switzerland, Belgium, France, Norway and Sweden. Only a very small supply reaches the United Kingdom because the other countries are ready to pay a higher price than that which can be obtained in the United Kingdom under the system of fixed prices and control of distribution which still prevails there.

Ten European countries exported a total of about 500,000,000 pounds of butter annually previous to the outbreak of war and none of these countries at the present time, with the exception of Denmark, has any surplus for export. On the contrary they are all in the market to purchase limited quantities at very high prices.

While the war was on the United Kingdom was the only country in Europe that was able to secure supplies of dairy produce from overseas, but with the shipping blockade lifted the market is enlarged by the demand from continental Europe at prices exceeding the controlled prices in England. The United Kingdom is still able to secure supplies of cheese and butter from Australia and New Zealand, having contracted the available exportable surplus from these countries to August, 1920, at 38 cents per pound f.o.b. for butter, and 21½ cents f.o.b. for cheese.

There has been some criticism in Canada of the policy of fixing prices and the control of distribution in the Old Country, but one ought to consider the peculiar and dangerous situation which existed and still exists before blaming the authorities in this matter. If the trade in dairy products in the United Kingdom has been left open to competition, the limited supply would have forced retail prices up to such a level as to be prohibitive for the working people, upon whom the supply of munitions and other war activities depended. Very serious results would in all probability have followed such a condition. The policy of control ensures that every person, rich and poor alike, receives the same quantity, and while there is some grumbling, those with limited means accept the situation much more cheerfully when they know that those able to pay any price are obliged to come under the same regulations as they are. The butter ration, which has been 1½ ounce per week for some time past, was lately reduced to one ounce per week, or just about as much as many of us in this country use at one meal.

Dairy production in Canada, Australia and New Zealand was not interferred with by the war, but there would have been a larger increase in production had a greater supply of labor been available. A severe drought is now curtailing production in parts of Australia. Canada is in a fortunate position, being the nearest to the United Kingdom of any important source of supply. A ship will make five voyages to a Canadian port during the time it will take to make one voyage to Australasia, and for that reason there was during the war, and still is, a great accumulation of produce in both Australia and New Zealand. For some time there was practically one year's make of cheese on hand in New Zealand. This accumulation is now coming forward and that accounts for the apparent indifference on the part of the Ministry of Food respecting the 1919 crop of Canadian cheese.

Early in July representatives of the Committee on Food Supplies of the Ministry of Food offered to take 20,000 tons of cheese at 25 cents per pound delivered in Montreal. The full quantity has not been offered to date. Practically no sales have been made for United Kingdom account since October 1st, the available surplus having been shipped to the continent of Europe, or at least purchased with that end in view. The exchange situation is, at the present moment, in-

terfering somewhat with this trade, but the continental market is still nominally higher than the price offered on behalf of British authorities.

The production of milk has increased in Canada during the war period. During the first two years the production of cheese increased, but it fell off again in 1918 and 1919 owing to the diversion of a large quantity of milk to the condensaries and milk powder factories.

The manufacture of creamery butter continues to increase in every province, although Ontario and Quebec continue to produce the great bulk of both butter and cheese. The prairie provinces are becoming every year more important sources of supply. In 1912 there was not sufficient butter made west of the Lakes to supply the local markets. A considerable quantity was imported from New Zealand and on an average of one carload per day was shipped into that territory from Eastern Canada. During the past year the local markets have not only been supplied, but New Zealand butter has been shut out and there has been a large surplus for export. It is only a question of time until a very large dairy industry will be developed in the prairie provinces. The manufacture of creamery butter is also increasing steadily on sound lines in the Province of Nova Scotia and there is a revival of interest in the dairying industry in the Province of New Brunswick. The industry has been well developed for many years in Prince Edward Island.

The manufacture of condensed milk has increased largely since the outbreak of war, and will reach about 100,000,000 pounds in 1919 with a value of something like $18,000,000. The milk powder output is also increasing rapidly. The total value of the cheese, creamery and dairy butter, condensed milk and milk powder, market milk and cream, ice cream, etc., for 1919 will be very nearly $250,000,000, of which about $65,000,000 worth will be exported.

There is no "reconstruction" necessary in connection with the dairying industry in this country. The market is assured. It is easily accessible. Our products generally stand high in regard to quality and are favorably received in the markets abroad. When conditions get back to normal on the continent our exports will probably again be confined almost wholly to the United Kingdom. This market is prepared to take greatly increased quantities of both butter and cheese from Canada. Canadian cheese is the standard article on that market. It leads all other imports in point of quality, price and general favor. The position of our butter on the British market will improve as we increase our shipments, and thus ensure regularity of supply. The outlook for dairying in Canada was never brighter than it is at the present moment.

Statistics of Canada's Dairy Industry

From "Bulletin of the Dominion Bureau of Statistics"

	1916	1917	1918
Number of dairy factories	3,446	3,418	3,371
Number of creameries	993	949	989
Number of cheese factories	1,813	1,900	1,885
Combined butter and cheese factories	624	549	476
Condensed milk factories	16	20	21
Production of creamery butter	82,564,130 lbs	87,526,639 lbs	93,266,876 lbs
Value of creamery butter	$26,966,355	$34,274,218	$41,845,164
Production of factory cheese	192,968,597 lbs	194,904,336 lbs	174,881,957 lbs
Value of factory cheese	$35,512,622	$41,180,623	$39,457,358
Production of condensed milk		32,105,799 lbs	41,195,604 lbs
Value of condensed milk		$3,811,281	$5,740,898
Production of evaporated milk		29,415,012 lbs	38,612,367 lbs
Value of evaporated milk		$2,635,952	$4,048,055
Production of milk powder		3,979,514 lbs	5.530,915 lbs
Value of milk powder		$817,287	$1,388,248

The Canned Salmon Industry of British Columbia

By H. BELL-IRVING
H. Bell-Irving & Co., Limited, Vancouver

WAGES have steadily advanced and are likely to be as high or higher during the coming season than ever before. The price of fish in the open market has never been higher than last season, and is not likely to be less, in view of the probability of fishing being thrown open to all, involving multiplication of gear and reduction of catch per head.

Operating conditions are becoming worse owing to increasing uncertainty of obtaining supplies of fish. The species of salmon of higher quality have become seriously depleted. Whereas fifteen years ago the British Columbia salmon pack consisted almost entirely of the higher species, only about 25 per cent. of the pack is now of that quality. This year's pack decreased about 20 per cent. as compared with the pack of last year.

The demand for canned salmon of the highest grades is excellent everywhere. Prices are higher than ever before. The lowest grade of salmon—chums—can only be sold at a loss. Most of the pack, both this year and last year, is still unsold. The export market in Europe is somewhat stagnant in view of the difficulty in exchange and the high cost of freight.

The outlook for the future of the salmon industry in British Columbia is poor, in view of the ill-considered fishery legislation. No settled policy has been pursued. The administration of the British Columbia Fisheries from Ottawa has been a dismal failure, and has resulted in useless expenditure of money, higher cost to the consumer, and depletion of the fish supply. The once wonderful Fraser River fisheries are now a thing of the past.

The salmon fisheries of British Columbia having for many years past in all important areas been largely overdone, there is no possibility for expansion, except in the packing of lower grade fish hitherto not in favor.

With regard to new lines of business, the packing of herring and pilchards has been taken up by several concerns with varying success. This business is still largely in the experimental stage, but there are probabilities of its developing into a substantial business. The shipment of dry salted herring to the Orient continues on a large scale, and also shipment of fresh fish throughout this continent.

The Furniture Manufacturing Industry

CONDITIONS during the past year in the furniture manufacturing industry in Canada have conformed pretty closely to those in most other industries. That is to say, skilled labor has been scarce and raw materials have been high-priced and difficult to procure. Production on the whole has increased somewhat, though it has not equalled the demand, with the result that stocks on hand have been reduced. The better grades of furniture have been mostly in request and marketing conditions have been unusually easy. Export trade has not been a factor of any consequence, though manufacturers report that they could readily dispose of furniture in overseas markets were they in a position to make it. The outlook for 1920 is regarded as favorable so long as production can be maintained uninterruptedly.

HIGH PRICES INTERFERE WITH EXPORT

By Thomas McGill

McGill Chairs, Limited, Cornwall

Manufacturing conditions during 1919 as regards labor, raw materials and general operations have been fairly satisfactory. Production was slightly increased, and compared very favorably with 1918. As to market conditions, we have found a greater demand for the better class of furniture than in the past. We find that the great increase in prices has interfered with the demand from abroad, and we have been asked to cancel all orders on file. Our opinion is that the prospects for furniture business look very good, but we consider we have an ample number of furniture factories in Canada to supply any demands.

STOCKS LOWER THAN A YEAR AGO

By Thos. Bell

President, The Bell Furniture Co., Limited, Southampton

We cannot complain very much as to manufacturing conditions during the year. Labor has been fairly easy with us. While there has been a certain amount of unrest, it is not serious, and for the past year our factory has been running up to normal. Raw materials have advanced considerably in price, but we have found where contracts were placed early, delivery has been made rapid enough for our requirements. Production has increased considerably over last year, but hardly as much as our sales, with the result that stocks are very much lower now than a year ago.

The tendency has been towards a better quality in furniture, especially in complete suites. Prices are naturally much higher and marketing has been easy during the past six months, as we find the stocks in the hands of the retailer are not heavy and a great many of the factories have gone into making special lines such as phonograph cases, which has curtailed production. Export business has never been a serious factor in the furniture trade. We are, however, finding a great many inquiries from the Old Country. We do not believe, however, that the Canadian factories will be able to take up this matter for some little time, owing to a shortage of goods for the home market.

The prospects for the furniture industry look very good at present. The demand is likely to keep up for some little time. We think, however, the manufacturing facilities of Canada are adequate to keep pace with the demands should the factories be working on their regular lines. We are planning to enlarge our dry kilns so that we may be in better shape to speed up production, but it is not our intention to add to our factory.

UNABLE TO ACCEPT ALL ORDERS

By Beach Furniture, Limited

Skilled labor has been difficult to secure, though we have not been handicapped for lack of same. Raw materials have been soaring continually, and in some cases have been almost impossible to secure at any price. Production has increased probably 25 per cent., though we cannot say definitely as our line has changed considerably.

The demand for furniture has been for the medium and better grade, though retailers would purchase anything offered, owing to the exceptional heavy demand for goods. We have been unable to accept all orders offered for home consumption.

The present outlook in the furniture industry is very bright. While trade in Montreal has fallen off considerably, we find other parts of country flourishing. In fact, orders are very easy to secure at present. We believe the demand for goods at present is caused by the large number of marriages, building, etc., and also due to a certain extent to large wages paid for help.

HIGHER PRICED FURNITURE IN DEMAND

By D. M. Wright

President, the McLagan Furniture Co., Limited, Stratford

Reporting as to the years' experience with regard to manufacturing conditions as they pertain to labor and raw material, would advise first that the problems in dealing with labor have throughout the entire year given us more or less concern, and while things seem to have settled down for the present, we would not be surprised if labor conditions in the early spring might not be more acute in Canada than they have at any time during this past year. With regard to raw materials, the tendency in most lines is still upward, and we are not anticipating any reduction in raw materials generally until the labor market becomes more settled; so that on the whole the tendency for lower prices on manufactured commodities is still somewhat remote.

In the matter of production—while our sales show a very considerable increase over 1918, yet it has been almost entirely made up in the increase in prices, as the actual number of pieces turned out this year is very little in excess of that of 1918. As to demand for furniture this year, we may state that the higher priced goods are very strongly in the lead, and the ability to sell expensive lines of furniture in Canada was never so easy as it is at the present time.

With regard to the opportunity of doing export business, we may state that we are of the opinion an almost unlimited amount of export business would be available to the Canadian furniture plants at the present time, providing they were in a position to bid for the business, but the demand in the home market has been so strong, and skilled labor so scarce, that it has kept the plants fully occupied in supplying the home market. There is also a feeling that the ability

to supply foreign markets at the present time is more or less temporary, and that as soon as things become normal in the European countries, that it would be impossible to compete as a result of their having cheaper labor, etc.

With regard to the outlook for 1920, we would state that we see no evidence of any slackening of the demand so far as the spring trade is concerned, but should there be a railroad strike or any general upheaval in manufacturing or marketing conditions, we believe that there would be a very sudden and very serious break; and we believe that there would be more or less good judgment displayed by manufacturers in being prepared to meet a reaction in trade which might be brought about by the conditions above mentioned.

Many manufacturers are no doubt at the present time in the same position as this factory, namely, their present demand for goods would quite justify substantial additions to their plant, but in view of the extraordinary cost of building and equipment, coupled with the uncertainties of the future, they feel inclined to move cautiously in this direction until labor conditions become more settled.

ONLY RUNNING AT ABOUT HALF CAPACITY

By A. E. Ruby

Secretary, The H. Krug Furniture Co., Limited, Kitchener.

Labor conditions with us seem to be slightly easier, especially for unskilled labor, but skilled labor is still quite scarce. There is some delay in obtaining some classes of raw materials, and prices of some materials are still advancing. We are operating full time, ten hours a day.

Production during the past year was slightly increased, but not to any marked extent, our output being larger but our manufactured stock showing a marked decrease.

The demand for furniture seems to run along the better grade. Prices and marketing conditions have advanced in accordance with the increases in the prices of labor and raw material. We are unable to do any export business owing to the increased demand for home consumption.

The present outlook for the furniture industry appears to be good, but owing to the shortage of help we are able to run slightly more than half capacity, being unable to secure sufficient skilled help. We have sufficient business ahead and would greatly increase our output providing we could obtain help. Under these conditions we have no prospects or plans for factory enlargement.

At the outbreak of the war a number of workmen left the furniture industry, taking up munition work and other occupations where better inducements were offered at the time. The greater portion of this help has not returned to the furniture industry, and has been lost to it owing to better wages being offered in tire and a few other factories in this locality.

NO REASON TO FEAR ANY SLACKNESS

By G. A. Gruetzner

The Hespeler Furniture Company, Limited, Hespeler.

With reference to our 1919 experience in manufacturing conditions, especially labor, we realize that there is only one way to avoid friction, and that is to be liberal with the men regarding pay, and talk matters over with them, in a friendly way, explaining why we insist on certain rules and regulations. Mechanics in the furniture line are very scarce, and they are well aware that trade is exceptionally good.

As to raw material, this is very scarce, and it is almost impossible to purchase same, especially air-dried lumber, on short notice. Besides, the same has advanced from 100 to 200 per cent. and over. Unless firms had a good supply, they would be up against it on account of shipping facilities, as it has taken from one to two months in some cases to receive shipments.

In reference to production, the same has not increased per article, but rather decreased, while sales, on account of the high price of labor and raw material, have increased more than a year ago. Strange to say, the tendency for furniture has been for a better quality than ever before, and considering the shortage of help, and that most of the factories are running with about 50 per cent. of the men they employed in 1913 and 1914, this accounts a great deal for the scarcity.

Even though furniture has increased in price, the demand has apparently been much greater than the increase, which must be accounted for as those who have been successful with war materials, and were receiving large salaries, have no doubt held back from purchasing during the period of the war, and are now anxious to get such articles as they have been looking for. There might be another reason, which cannot be denied, that furniture has been far below its value, on account of cheap labor and cheap material, and in the writer's opinion, will never go back to the old price, no matter what the conditions may be.

There have been all kinds of opportunities to manufacture certain lines for export; for instance, phonograph cases, etc., which, however, could not be entertained on account of the home market requiring the entire output.

As to the outlook for the future, the writer is of the opinion that there is only one thing which could effect same, and that is labor trouble, especially such as the individual manufacturer cannot control, viz., the present coal strike. Should the demand be fairly well supplied in the home market, there would be so many opportunities in foreign markets that in the writer's opinion there is no reason to fear any slackness.

PRODUCTION HAS BEEN DECREASED

By J. E. Campbell

Sec.-Treas., The Hepworth Mfg. Co., Limited, Hepworth

Manufacturing conditions during the year just closed have been bad. We have had difficulty in obtaining raw materials, while labor has been hard to get, and not nearly as efficient as in former years. Production has decreased owing to our plant operating nine hours instead of ten and because of scarcity of labor and materials. The value of output, however, has increased, caused by higher prices.

Market tendencies have been towards higher priced goods, but owing to scarcity all lines are actively in demand. We have had a number of requests to undertake export business, but have been unable to attempt it. Our feeling is that business will be very active in 1920, but we look for a decline in both demand and prices towards the end of the year, and whether mistaken or not, are making calculations for a decline in 1921.

An Ontario Manufacturer.—"Labor is high-priced, inefficient and scarce. Production is only about 60 per cent. of that of 1913. Commodities are still advancing and some are hard to obtain at any price. The highest quality of furniture is most saleable, and lower qualities are saleable provided prices are high. The buying public are madly extravagant. It is impossible for us to export because of home demand and short production. Our plants are running only 60 per cent. capacity, because of labor scarcity. Beginning 1920 we are already three months oversold and have had our travellers off the road for months. We expect a furniture famine all next year."

Leather and Leather Goods Industry

TANNERS are reporting improved conditions in their industry so far as manufacturing conditions are concerned. Labor has been more plentiful and the supply of raw materials has been easing somewhat. Production has increased slightly, stimulated by a demand which has grown to very large proportions. The domestic demand, especially for the finer grades of leather, has become very heavy and looks as if it would continue throughout 1920. On the other hand foreign business, which was very promising, has been curtailed by the adverse state of exchange. The outlook is regarded as rather speculative, with prices so uncertain and exchange in such an abnormal condition.



Leather Cutters at Work in a Boot and Shoe Factory

LEATHER AT THE HIGHEST PRICES

By Charles Robson

Robson Leather Co., Limited, Oshawa

We have plenty of labor in this district providing we could house same. Raw materials are in ample supply and production has been increased 25 per cent. over preceding year. All kinds of leather are in good demand at the highest prices ever recorded. While shipping space is rather limited we have so far managed to secure sufficient space for all shipments, although there has been some delay incurred.

At the present time we are exporting about 40 per cent. of our production. All signs point to a greatly increased foreign business. There will undoubtedly be a very heavy demand during the coming year from foreign countries for leather of nearly all kinds. The supply will be adequate. We have already completed extensive additions to our plant in order to take care of increased business.

Generally speaking, tanners have sufficient orders already booked to keep them busy for the next two or three months. At the present time foreign orders are rather slow in coming, owing to the low rate of exchange and the end of the fiscal year with many. We look for better and bigger business at the beginning of the new year.

BUSINESS HAS BEEN SPECULATIVE

By John Sinclair

Manager, The Barrie Tanning Co., Limited, Barrie

Labor has been very scarce and restless and the production per man lower than what might ordinarily be expected. There is to-day a better supply of unskilled labor, but no improvement in the skilled help situation. The raw material market has witnessed extreme fluctuations in prices, causing curtailment in manufacturing, as prices were too speculative for sound business. Our output is on a par with that of a year ago, but still much below normal.

The demand for best qualities has been extremely brisk, prices during the past summer being no object, the main thing being to get the goods. At present more conservatism is displayed. Export demand has been fair, but shipping and other conditions hampered it very much, and at present overseas demand is cut off owing to exchange conditions.

The outlook is not very encouraging for foreign business, although domestic trade will be good unless some outside calamity, which we cannot foresee, takes place. As already stated, business for the manufacturer has been extremely speculative, interfering very much with volume, as we feel that our best plan is to follow the safety-first policy. Factory capacity in Canada is ample to take care of the domestic requirements of leather and a large export business as well. In fact tanning capacity, if running full, would take care of the home market and export upwards of 50 per cent. of its output, but we doubt if any of the tanners will be running to capacity until conditions become nearer normal, as with the market for raw materials so unsettled, it is too great a risk to load up a plant at to-day's prices, other unsettled conditions being taken into consideration as well.

GENERAL REVIEW OF THE TANNING INDUSTRY

By an Ontario Tanner

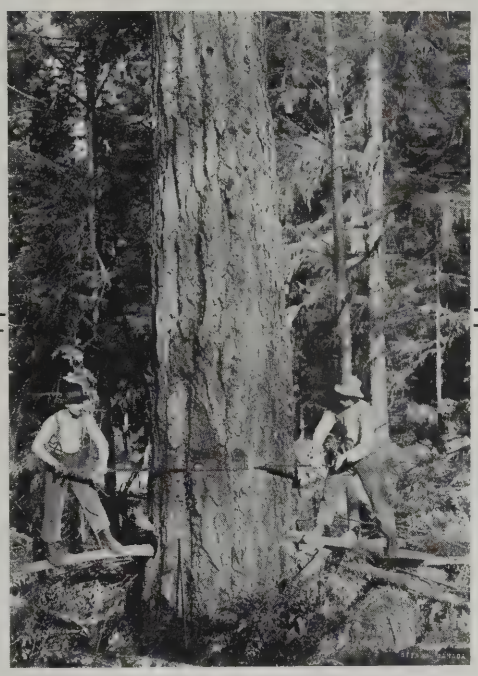
The year just closed may fairly be said to have been one of improving conditions for the tanning industry. Labor, while by no means plentiful, has been more easily obtained than during the two years preceding, and while some demands for increased remuneration have been met, the tanning industry has not been forced to make the radical advances in wage schedules that have been the case in some other lines of industry.

Raw materials have been on the whole exceedingly scarce and very high in cost throughout the year. First, because of exceedingly depleted stocks so far as the North American continent is concerned, coincident with a general shortage in the world's supply of all classes of raw materials used in the industry; and second, this shortage so far as our country is concerned has been increased because of the difficulty of transportation, shortage of ships, etc. These latter conditions are easing up slightly during the closing months of the year making certain lines a little easier to obtain. Nevertheless, the world's situation at the moment is one of shortage, and it would appear as though it will take a very considerable time

(*Continued on page* 284)

Conditions in the Lumbering Industry

IT is practically the unanimous experience of lumbermen that the cut of the past year was less than that of 1918 and considerably below the normal cut of pre-war days. Scarcity and inefficiency of the labor supply has been largely accountable for this result, there having been great difficulty in securing and holding men. On the other hand the demand for lumber has been strong and there has been no trouble experienced in selling all that could be produced. That the scarcity will continue for some time is obvious for there is not much likelihood of any considerable increase in production for some time to come. It is believed that mill capacity is ample and that it will rather be a case of bringing operations up to present capacity than of extending facilities. As in the case of the pulp and paper industry, it is gratifying to note that efforts are being directed towards the conservation of the country's forest wealth. A good deal of the work is being undertaken by governments, but several companies are going in for reforestation on their own account. Reports from various parts of the country follow.



Big Timber in the Forests of British Columbia

ALL KINDS OF LUMBER IN DEMAND

By Ward C. Hughson

Gilmour & Hughson Limited, Hull, P.Q.

Production for 1919 has been just about equal to 1918. Both years were 25 per cent. below pre-war days. Labor has been in short supply and inefficient. Transportation was somewhat better. Cost of operations was greatly in excess of that of 1918 on account of shorter hours and increased pay. The state of the market has been excellent, both for domestic and export. Every and all kinds of lumber have been in great demand. The outlook for 1920 looks exceedingly bright at the present time. We do not know of any enlargements in prospect and think there will not be any increase in out-turn under conditions as they have prevailed for the past year. We are not aware of any companies doing other than they have in the past to conserve timber resources.

LABOR SUPPLY A SERIOUS FACTOR

By Geo. W. Grier

G. A. Grier & Sons, Limited, Montreal

As a general rule, production has been falling steadily for the last three years or so, and it is probably anywhere from 20 to 40 per cent. less than in pre-war days. I should say that the 1919 cut on the whole would be considerably less than the 1918 production.

The industry has suffered from an insufficient supply of labor, and in many cases the labor available is inefficient as compared with previous years. It is said that many of those who went to the war and were formerly woodsmen, now prefer to remain in the cities rather than work in the bush. As to transportation, every business man knows what ocean shipping conditions were during the war, and since the signing of the armistice. Conditions of transportation by rail have varied a good deal. There have been several periods when the car supply for lumber shipments was anything but satisfactory, especially the supply of U.S. cars to carry lumber for the U.S. trade. Costs of operation have naturally greatly increased with advanced wages for labor and advanced prices of all the varied supplies required to carry on a lumbering operation.

The domestic market, the U.S. market, and the demand from the United Kingdom have all been strong, and today almost any class or grade of lumber finds ready sale in one of these three channels. There appears to be little doubt but that Canada will be able to sell at good figures all the lumber that can be produced during the coming year. With the present strong demand, manufacturers will naturally produce all they can, but the labor supply is such that it is doubtful if the output for 1920 can be very materially increased.

I cannot give much information about conservation of timber resources. In the Province of Quebec, the Provincial Government have certain regulations prohibiting the cutting of small timber under a certain specified diameter on the stump. Many of the larger timber limit holders, it is generally understood, are, of their own accord and in their own interests, leaving the smaller trees standing and taking only the larger-sized timber. I believe the Federal authorities at Ottawa have also established a bureau to investigate ways and means of preserving our timber supply.

COSTS HAVE ADVANCED ENORMOUSLY

By W. F. Beck

The C. Beck Mfg. Co., Limited, Penetanguishene

Production generally has been less during the past year than in pre-war days, and a little less than in 1918, we believe. There is a constant shrinkage of output in Ontario, owing to the depletion of the forests and so much of it getting so far back and unhandy to log. This is seen in the number of mills closing up all along the Bay.

As regards labor, there has never been, in the history of the industry, such a poor class as regards stick-to-it-iveness, and each year seems to be worse than the last. As this industry, before all others, is practically all labor, you can readily see that the costs have advanced enormously, much greater than the price of the saleable product, and there is no question that people generally were under a great misappre-

hension as to the value of the product in regard to the costs of manufacturing it. Even yet the selling price has not caught up to the increased cost. In reference to the labor, we do not think there is another industry that puts up with so much from inefficiency and from the constant change and turnover of its personnel. They call it in the north country a three-gang crew, one gang coming, one at work, and one gang going out. This is a fact this last year especially. We have had some camps brought from seventy-five men to twenty-five in one week. All these men have to be transported from Montreal, Ottawa and Toronto. They go in, turn around, and come out again. The loss in railway fares, time, etc., is something enormous.

The market this year for lumber, both domestic and export, has been good. All kinds have been saleable, and there looks like a distinct shortage, especially in Ontario, and we look for considerable scarcity next spring.

As to expansion in this industry, there certainly cannot be any in Ontario. Instead of this, there is a depreciation and shrinkage each year, and expansion will have to come from other sources. There is enough capacity, we believe, to nominally take care of twice as much business as there is.

In regard to the conservation of timber resources, this is such a large subject and there has been so much said on it, that an individual has not much to say on such a subject, but there are a few items that the Government are at fault on. They are allowing settlers going into wooded territories instead of keeping them in sections where the land is good and there is no possibility of fires, and another is the granting of mining rights in good timber areas. They say it is a fact that prospectors have burned up wooded areas, just to get at the minerals beneath. The Canadian Forestry Association has been doing good work in regard to this.

Statistics of the Canadian Lumber Industry for 1918

Compiled by
Dominion Bureau of Statistics

Number of operating plants	3,086
Capital invested	$180,017,178
Logging and timber plants	36,516,701
Mill equipment	53,791,373
Materials on hand, etc.	54,147,889
Cash and accounts	35,561,215
Employees on salaries	3,550
Salaries paid	$4,911,735
Employees on wages	56,816
Wages paid	$44,490,917
Material, fuel and miscellaneous expenses	68,498,520
Value of production	144,908,864
Sawn lumber	102,335,772
Shingles	8,124,968
Lath	1,560,136
Pulpwood	18,416,438
Miscellaneous products	14,481,550

MARKET CONDITIONS HAVE BEEN STRONG

By Ottawa Valley Lumberman

The situation is naturally more or less erratic at the present time in the lumber trade, similar to what it is in practically all other trades, and therefore it is difficult, if not more or less impossible, to forecast the future.

The product in the Ottawa Valley in 1919 will not run over 75 per cent. of what it was in 1918.

Labor has been fairly plentiful at the manufacturing points during the season, and while this has had somewhat of a better effect on its efficiency, the high wages, shorter hours, etc., has resulted in increased costs, with curtailed production, necessitating higher selling values. Transportation and weather conditions have been normal and no adverse results to the trade can fairly be attributed thereto.

Market conditions have been strong and must continue so with the short supply and continued increased cost of production. All lines of lumber have shared equally in the demand.

As to the future—Is there anyone who can with any degree of accuracy foretell what it will be with the many new conditions cropping up from day to day? Clearly not definitely. On the other hand, if prices and demand do not keep up, it is questionable if the manufacturers can afford to continue operating.

THE INDUSTRY IN NOVA SCOTIA

By Davison Lumber & Mfg. Co., Ltd., Bridgewater

Production for the year 1919 has not been maintained even to the 1918 level and is only about 25 per cent. to 30 per cent. of pre-war production. Supply of labor has been poor and the efficiency of what was available only about 50 per cent. Both supply and efficiency would appear to be on the mend now.

Weather last logging season was the worst we have experienced in Nova Scotia for a good many years, there being practically no snow and very little frost. The winter was a very open one and this entailed our leaving quite a quantity of felled timber in the woods.

Costs of operation still continue to mount upwards, due to increased wages, supplies costing as much or in some cases more than during war times, and the lesser efficiency per man per day.

The market has been good, both domestic and export. Our output of lumber is sold mainly to United States, South America, Cuba and Madeira, and the demand from all these points has been good at fair prices. Our flooring and box mill department has been working time and a half for several months and its entire production is sold locally.

The outlook to us is encouraging and we anticipate a quick return to pre-war basis of production. We believe for several years to come the market of the world will demand a large supply of lumber.

We fully anticipate to operate our plants to their full capacity next summer. We have an ample supply of labor in the woods for the present logging season, which we believe will give us an almost pre-war cut, and our organization has been held together ready to take advantage of the expected demand.

Being the largest operators in Nova Scotia, working together with the Canadian Forestry Association and our local legislators, we are using every endeavor and means at our command to conserve the forests here, particularly in regard to fire. Of reforestration nothing is being done in Nova Scotia at the present time.

LARGER LUMBER CUT FOR 1920

By W. Gerard Power
Manager, River Ouelle Pulp & Paper Co., St. Pacome, P.Q.

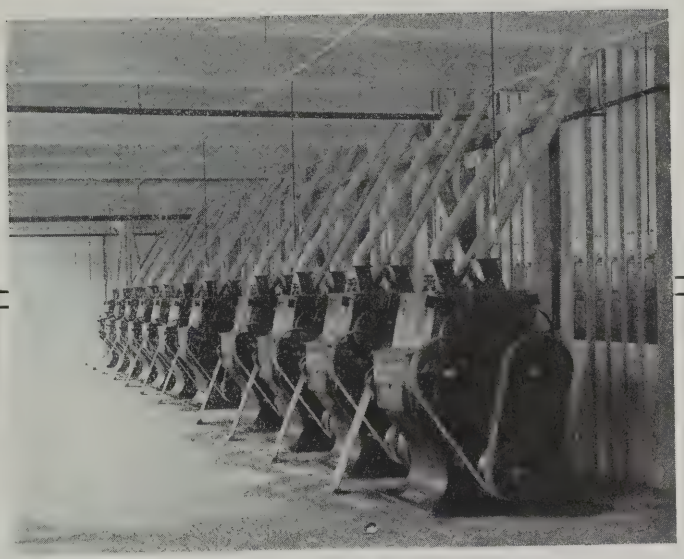
I do not consider that there will be very much difference between production in 1918 and in 1919. Production of 1919 is, as a general thing, as far as Eastern Canada is concerned, considerably less than in pre-war days. This is owing to the difficulty of securing necessary labor for the woods operations.

During the summer of 1919 men have been a little more plentiful for mill operations, and efficiency has been possibly somewhat better than in 1917 and 1918. The car supply for

(*Continued on page* 290)

Milling and Food Products Industries

WITH flour mills under governmental control and regulation, both as regards the price at which wheat is bought and flour is sold, the Canadian milling industry has been in rather a colorless position during the past year. So far as actual operations are concerned mills ran pretty steadily throughout the year except for a period of two months, when they were shut down owing to lack of wheat. Both domestic and export business was good, with export demand particularly strong. Production was about on a par with that of the previous year and, if anything, was a little larger, due to the increased capacity of some mills. The outlook for the industry is rather difficult to estimate on account of the continuance of government control, but it is believed to be favorable. With its abundant supply of the best grades of milling wheat there is sound reason for believing in the permanence and prosperity of the industry.



A Modern Installation in a Big Canadian Flour Mill

Photo by courtesy Ogilvie Flour Mills Co., Limited

OUTLOOK FOR MILLING BUSINESS GOOD

By A. E. Labelle

Vice-president and Managing Director, St. Lawrence Flour Mills Co., Limited

Our industry is rather in a peculiar position at the present time owing to practically the whole of it being controlled by the Canadian Wheat Board. The price and delivery of wheat is regulated by them. The price of flour and feeds is fixed by them, and they practically handle the whole of the output that goes to European countries. In consequence, things are not normal, but on the whole I think it was the best that could be done under present circumstances, and has resulted in fixing prices on a fair basis, allowing a reasonable profit to millers, and by controlling the price of wheat, preventing any increase in the cost of bread.

The milling business is one that is particularly adapted to Canada. In fact, it is one of the really fundamental—if I may use such a word—industries in Canada, as we have a large supply of wheat of the very highest quality. There is no question that Canadian wheat has the reputation, the world over, of being the finest wheat grown, and like every other natural production of Canada, it is in the interest of the country that everything possible should be manufactured here; in the first place, to supply work for our labor, and in the second place, one which is very important in milling, the greater production of mill feed for the feeding of our cattle. If Canada could export all that she can sell outside in flour instead of wheat, it would mean a larger quantity of mill feed, which would be available for the supply of another great Canadian industry—dairy and cattle raising.

There has been very little trouble in the milling business with the supply and efficiency of labor. I do not think any mill has been much troubled that way, and the labor has been, as usual, fairly satisfactory. As I have stated above, the quality of grain is very good and the supply fairly satisfactory, although mills have been closed down for nearly two months last year, due to the exportation of a large quantity of wheat. They have been very busy for the rest of the season. Both domestic and export business has been very good. The export demand was, of course, enormous, and is likely to remain very large for some time to come.

This industry has really not been affected by Government regulations or restrictions. Mills might have made a good deal more profit if they had not been controlled, but this I do not think would have been in the interest of the whole country. The flour being all bought for export to Europe by the Canadian Wheat Board, the transportation problem has been a very easy one, this article being one of the first that was given preference in order to supply the immediate wants of the European countries. As far as local transportation between different points in Canada is concerned, it has been practically the same as usual. During winter months, the usual blockade of freight has taken place from time to time, but I think on the whole that the railways, during the last winter, have done pretty well under adverse circumstances.

I think that the production of 1919 is about the same as 1918, with the exception that a few mills have added somewhat to their milling capacity; but on the whole, since the beginning of the war, mills in Canada have been running more than they have at any other time before.

FEATURE OF FLOUR MARKET HAS BEEN CONTROL

By D. A. Campbell

Maple Leaf Milling Co., Limited, Toronto

We have had no difficulty in securing all the labor we require, but the efficiency of the average workman is certainly much below pre-war standard. Grain this year is of a fair quality. There is considerable wheat that contains an excess amount of moisture due to wet harvesting conditions in the West. General operations of the company's plant have been satisfactory.

The outstanding feature of the market for flour this year has been the control of the Canadian Wheat Board, whose

(Continued on page 246)

The Mining Industry in Canada



Milling Operations at Britannia Beach, B.C.

By WYATT MALCOLM
Geological Survey, Ottawa

IMMEDIATELY after the signing of the armistice a year ago, there was a great feeling of uncertainty as to the future of Canadian industries, and as to the time that would be required for the restoration of normal conditions and the vicissitudes through which the war-disturbed countries must pass in the interval.

Mining men felt the uncertainty and realized that the success of the mineral industry depended in a large measure on the success of other basic industries. They were interested in knowing whether capital would be available for mining enterprise and for those numerous industries dependent for their raw material on the products of the mine, whether labor of adequate quantity and quality would be obtainable, and whether the cost of supplies and the wages demanded would permit of profitable mining.

Labor Conditions More Satisfactory

The year 1919 has removed some of the uncertainties, but has not effected such progress towards normal and stable industrial conditions as had been anticipated. The feeling of anxiety about the labor situation and about social upheavals and revolutionary tendencies has been considerably relieved. An attempt to establish in Canada a communist order with a dictatorship by mass action was happily frustrated, although conditions in the western provinces were much disturbed and considerable uneasiness was manifest in the cities of the east. During the spring and early summer there were strikes in many industries and much time was lost. The mining industry itself was affected by strikes, and work ceased for a time in many of the coal mines of western Canada, in one of the big copper mines of British Columbia, in the gold mines of Kirkland Lake district, and the silver mines of Cobalt. In nearly all cases, however, an understanding has been reached between employers and employees, and the labor conditions of Canada have now for some time been more satisfactory than those of almost any other country directly affected by the recent war.

The mining industries as well as other industries have, however, suffered from the inefficiency of labor. Too frequently an increase in wages has been accompanied by a decrease in the efficiency of the workmen. High wages have also tended to render labor unstable and to produce more or less idleness. The personnel of the mining staff changes too frequently. The workmen feel their strength as they never felt it before, and as a result their service is not so satisfactory.

Unfortunately, mining conditions tend in some cases to render labor troublesome and unsatisfactory. For instance, so many coal mines have been opened in the Province of Alberta, that to work them to capacity the year round, would result in a production much greater than the market demands. The prevention of over-production, therefore, necessitates the working of the mines for only a part of the year. Under such conditions there must be more or less discontent. It was expected that the close of the war would be followed by a period of reconstruction in the devastated countries, by construction of all kinds that had been postponed by the Allied nations for the duration of the war, by the replacement of obsolete machinery and manufacturing plants and by the repair of the long wear and tear. Had these expectations been realized there would have been an insistent demand for the base metals and common minerals, and the mines and quarries of Canada would have made a generous contribution towards the filling of this demand. Reconstruction has, however, not been as rapid as had been expected. The European countries were exhausted; the fall in the value of European monies has militated against the purchase of materials from America; there have been numberless strikes and social upheavals amounting in some cases almost to revolutions; and lavish expenditure on luxuries has diverted attention and capital from the more desirable construction work.

The hoped-for lowering of the cost of living has not come about and in general the prices of commodities are higher now than at the close of the war. Money has been spent lavishly but it has been spent in luxuries. A great deal of money had accumulated in the hands of men who had not been accustomed to its use and whose best idea of the use of wealth was the satisfaction of the desires for personal pleasure. They had not learnt the wisdom or art of careful and judicious investment in enterprises that result in the establishment and growth of constructive industries that are productive of national wealth, industries that are permanent and contribute to the necessities and comfort of mankind. There has, therefore, not been as great a demand for the base metals and common minerals as might have been expected.

Strong Market for Precious Metals

A survey of the mining industry for the year 1919 shows that the mining and quarrying of many of the minerals were adversely affected by unstable labor conditions and by an uncertain market. On the other hand there was a strong market for the precious metals, gold and silver, and, except when certain mining districts were troubled with strikes and labor shortage, the mining of these metals was prosecuted with vigor. The war created conditions that led to the active mining of certain minerals that had been previously recovered on only a small scale. It is gratifying that there are prospects that at least one of these will continue to command a good market.

Copper is one of the base metals that enter into constructive work of a fairly permanent character. The interests of

copper mining are, therefore, intimately related to the restoration of stable, normal conditions.

The close of the war found the Allied Governments with large stocks of copper on hand. The uncertainty about a future market led Canadian producers to curtail their output. The reduction in the demand for nickel resulted in a great decrease in the production of copper associated with the nickel in the Sudbury ores. Mines and mills in British Columbia were run for a time at only a fraction of their capacity. With the increase in the price of copper later in the year there came a resumption of more intense operations; for instance, the Britannia mine, one of the largest producers of British Columbia, is said to be working at capacity. Labor trouble was encountered for a time at Anyox where one of the very large bodies of ore is being mined, and although work was resumed there is difficulty in obtaining satisfactory labor. The large, low grade copper deposit that has been developed at Copper Mountain is ready for mining, and the mill, having a capacity of 2,000 tons of ore per day, is complete, but neither the necessary railway line nor the power transmission line is finished, owing it is said to the impossibility of procuring laborers.

The copper market is not satisfactory. Copper mining, however, continues and a large surplus of the metal is accumulating. The expected demand has not materialized, the price has dropped, and the future is uncertain.

Production of Coal Decreased

There was a very considerable decrease in the production of coal throughout the country during the first nine months of the year. This was due in part to a contraction in the market, and in part to the greater import of American coal into Manitoba. This importation affected the mining in Alberta adversely, although production in this province was also greatly hampered by strikes. The results of the carbonizing and briquetting of lignite by the Government plant to be established in Saskatchewan will be watched with interest. It is said that briquettes will be produced in 1920. It is to be hoped that the shipments of coal from the Sydney field up the St. Lawrence this year is the beginning of the recapturing of the Canadian market and that this branch of the Canadian coal trade will undergo great expansion.

With the close of the war and the consequent break in the requirements for immense quantities of nickel for war purposes came a stringent reduction in the operations of the nickel mines at Sudbury. There was not the demand for nickel for the manufacture of high grades of steel that there would have been had normal industrial conditions been established throughout the world and more permanent constructive work been undertaken. Production was, therefore, greatly curtailed in the beginning of the year, but is recovering its pre-war status. The rise in the price of silver, and the possibility of silver coinage being driven out of circulation on account of the silver content of the coins exceeding their face value has revived the suggestion of the use of nickel in coinage. Nickel is used to a certain extent for this purpose now, and it seems probable that financial considerations may make an extension of this use in the near future advisable. Sudbury is the main nickel-producing district of the world; there are large reserves of ore and the producers would no doubt welcome the opening of any new outlet for the metal.

It was stated in the January, 1919, number of INDUSTRIAL CANADA that an increase in gold production might be expected. This prediction has been fulfilled, at least, in so far as it applies to mines that are worked for their gold alone in contradistinction to those in which gold is associated with copper ores. In Ontario, where the gold mines are of the former class, the production for the first nine months of 1919, was 366,288 ounces as compared with 336,394 ounces for the corresponding period of the preceding year. And this in spite of the strikes in the Kirkland Lake district, which, unfortunately, led to the closing of the mines of that district in the spring and permitted only recently of resuming operations.

The main production was from the Porcupine district where large reserves of ore for future production have been blocked out. The Hollinger mine alone will have paid by the end of the year a dividend for 1919 of $1,722,000. Work in this district is hampered at present by a scarcity of miners.

Abandoned Mines Re-opened

The high prices of silver, which is worth nearly three times what it was a few years ago, led to a careful investigation of the ore-producing possibilities of various silver properties and prospects. Mines abandoned years ago were re-examined, and claims that in normal times received scant attention became objects of great interest. Valuable deposits were developed in north-western British Columbia and shipments of high-grade ore were made. Among the properties that attracted attention are the Premier and the Dolly Varden. The Silver Standard of the Hazelton district was operated, and discoveries were made of deposits of high-grade silver lead ores in the Mayo district, Yukon Territory.

The increase in the value of silver is of vital interest to the Cobalt mining camp. A great deal of low-grade ore was handled and dumps that had at one time been regarded as of little or no value grew into importance. The production of Cobalt is on the decline, but the high prices of the product has had the effect of lengthening the life of the camp by admitting of the economic handling of ore of much lower grade than had heretofore been possible. The production of silver in Ontario for the first nine months of 1919, which included a strike period of over six weeks, was 7,475,396 ounces, as compared with 13,145,596 ounces for the corresponding part of 1918.

The year witnessed a decrease in the sales of metallic cobalt. This was due probably to a decrease in the demand for the alloy stellite, which has been used mainly for making high-speed cutting tools. It is expected that a market will be developed for the use of this alloy in the manufacture of surgical and dental instruments and cutlery of a high grade.

The mining of a number of minerals was given an impetus by certain conditions created by the war, and the effects of the restoration of peace were watched with much interest. Mention may be made of such minerals as molybdenite, chromite, pyrite and magnesite.

Molybdenum Mining Ceases

The mining and milling of molybdenum ores in Canada became established during the war on account of the acute demand for molybdenum required for the manufacture of a special kind of steel. When the demand was satisfied prices dropped below a figure at which the material could be profitably produced and the industry fell into abeyance. Hopes are entertained that uses will be found for molybdenum steel that will lead to a revival of the industry.

As a result of special efforts a great increase was made in the production of chromite in 1918. The latter part of 1918 and the year 1919 saw a slackening in the demand and some of the mines closed down. Production on a reduced scale was, however, continued and the yield for 1919 will be about 8,400 tons valued at $350,000. The chronic oxide content will be approximately half of that of the output for 1918. This may be considered fairly satisfactory.

Owing to the great expansion of the explosives and other chemical industries in North America during the war, a great

(*Continued on page* 270)

Conditions in the Packing House Industry

NINETEEN-NINETEEN was a year of marked readjustment in the packing house industry. The change from war to peace conditions was accompanied by variations both in markets and in prices. Foreign demand for beef fell off and export demand is now largely restricted to pork products. At home, however, demand for meat of all kinds has increased greatly. From the production standpoint output was about the same as the previous year. The packers look for a continuance of good business both at home and abroad owing to the reduced herds of cattle in Europe, which it will take several years to replace.

THE INDUSTRY DURING THE FIRST YEAR OF PEACE

By E. C. Fox
President and General Manager, The William Davies Co., Limited.

At the time of the armistice, Canadian packers were selling for export both beef and bacon products through the British Ministry of Food. The cessation of hostilities, which rendered safe ocean transportation, diminished the necessity of having ample reserve supplies of meat products in Great Britain. The result was a permanent termination in the purchase of Canadian frozen beef and a temporary cessation with respect to bacon. The exports of frozen Canadian carcass beef in 1919, other than those that had accumulated in storage at the time of the armistice, have been insignificant, and indicate that the export of carcass beef carried on during the war was only of a temporary character. The lack of pressure, of course, for export has lowered the price of beef in Canada very materially, and relative to other commodities beef has been selling at a low price to consumers—consequently there has been a very excellent domestic demand for fresh beef.

The export bacon situation recovered itself by March, and de-control took place in England on 1st April, and lasted until July. During that time the market, already at a high level, advanced beyond all expectation. This was owing chiefly to so many new packing houses in the United States getting into the export bacon market through the British Ministry of Food, and finding it profitable. They seemed to think they could export anything to England and sell it. Instantly on de-control, a tremendous competition set up all over America to buy hogs, and the cost kept advancing just as dramatically as the selling price in England.

The advance of price in England had an abrupt termination in August, when it was discovered that there were stocks on hand to last for several months, and at the same time the British Ministry of Food took over control again. It was at this point that the Canadian packer demonstrated his standing on the English market, and gave evidence of the type of service that he had rendered in maintaining the standard quality of his bacon during the previous four years.

At the time de-control took place, Canadian bacon was in the greatest demand in England that it had ever been, owing to the fact that under control Canadian bacon was distributed throughout Great Britain to many buyers who had never before handled it, and it was the only bacon landing in Great Britain during the war that maintained its old standard. The advantage taken by the American packers of the urgent requirements of Great Britain is notorious. Consequently, when the break came in August, with the discovery of enormous supplies of bacon, it was found that there was no accumulation of Canadian bacon, and that this product has gone steadily into consumption; and the result was that Canadian bacon was disposed of at a loss greatly less than that sustained by American packers.

The Canadan live hog situation is not bright. The supplies for 1920 will not be adequate to the demand. I recently heard that a Vancouver packer had bought live hogs in Winnipeg for shipment to Vancouver. This is probably the first time that a shipment such as this has been made in the last ten years, and indicates a serious shortage of hogs in Western Canada. Indeed I would think that for 1920 Western Canada will have to import bacon from the United States or Ontario.

The hog situation in Ontario this year about held its own with last year, but I look for a decreased run of hogs for 1920 owing to the shortage in this province of grains fit for live-stock.

The price of grains has ruled high relatively to the price of hogs. Most farmers in Canada breed hogs from the point of view of immediate profit, rather than an average profit over a period of years. The discrepancy between the price of grains and live hogs has also discouraged production this fall. A year ago the Dominion Department of Agriculture set out on a big campaign of urging the production of live-stock. At a very critical time like this, when such a campaign is needed more than ever, the Department remains inactive, and any advantage that came from the campaign of a year ago is likely to be lost.

PRODUCTION NOT ADEQUATE TO THE DEMAND

By Swift Canadian Co., Limited

The supply of labor during the year generally has been ample for our requirements and, with the return of quite a number of former experienced employees, efficiency has been improved as compared with last year.

As our supplies consist of live-stock and produce grown on the farms, we depend on live-stock production for our raw materials. The supply has been somewhat greater than last year, but in the case of cattle the quality has not been as good, there having been marketed quite a number of unfinished cattle, possibly due to high cost of feed.

Operating costs continue on a very high level, all supplies being at a very high figure.

Production has been somewhat increased in proportion with the increase in live-stock and produce. Present output is about the same as last year.

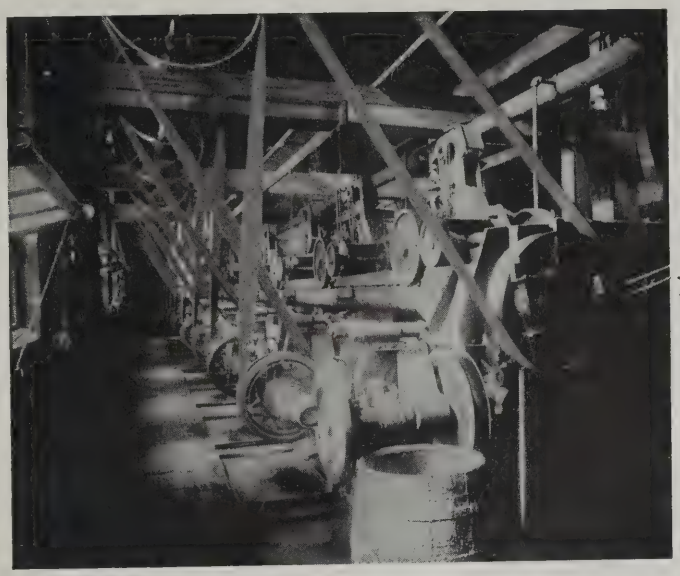
Board of Commerce rulings affecting our business have had a tendency to restrict the free movement of certain products and have forced us to discontinue the sale of other products.

Domestic demand for all products has been greater than the previous year. Export demand has been restricted to chiefly pork products and produce, as when the armistice was signed other markets such as Argentine and Australia were opened to the United Kingdom on beef, which has naturally

(*Continued on page* 250)

Review of Paint and Varnish Industry

PAINT and varnish manufacturers have experienced a very busy year. Capacity has been largely increased and output enlarged. At the same time costs of operation have advanced in such a way that it is probable that net profits have not been as great as with the smaller turnover. The demand for paint, and particularly for paint of the better grades, has been very large. As a material employed largely by manufacturers of other goods, its use has grown with the increased activities of general industry, and at the same time the demand for paint for domestic purposes has been very active. Export business has been brisk, and the fact that expansion in this direction offers such good opportunities has been the basis for a good deal of the enlargement of capacity that has been taking place. A continuance of favorable conditions in 1920 is anticipated.



Scene in the Linseed Oil Department of a Canadian Paint Factory

Photo by courtesy Sherwin-Williams Co., Limited

BEST QUALITY GOODS IN DEMAND

By F. Moore

General Manager, Benjamin Moore & Co., Ltd., Toronto.

Our experience in the matter of labor supply, raw materials, and general operations, in the past year, has been, generally speaking, normal. That is we have not experienced any serious trouble in getting raw material, or getting labor. Consequently, we are not hampered in our operations.

Production increased considerably over a year ago, but it cost us considerably more to produce the same quantity as the year before, owing to the increase in wages. Our output, as compared with a year ago, has a very handsome increase.

The kind of goods in demand are mostly of the best quality. Profits were fairly good, but we are below the average, owing to the enormous increase in selling expenses, as well as manufacturing expenses.

The outlook is extremely good, as far as we can see. Apparently, the public have got accustomed to high prices, and the trade is buying in larger quantities, and a more optimistic spirit prevails. It is our opinion that we will have difficulty to take care of the business we will be able to get. To this end, we are putting up a new addition to our plant.

OBLIGED TO INCREASE CAPACITY

By J. H. Waterbury

President Manager, Pratt & Lambert, Inc., Bridgeburg, Ont.

The year 1919 has been the largest year in our experience in point of sales. We have had no labor trouble, though we have had more or less difficulty in securing competent help from time to time. Also, materials in our line were exceedingly high in cost, and some of them, notably varnish gums, exceedingly scarce.

Our production has increased in proportion to our sales during the year, but having reached its maximum point, we have been obliged to increase our plant and equipment, which considerably more than doubles our former maximum capacity and puts us in position the first of next year to produce from two to three times the quantity as in the past.

The tendency seems to tend to the sale of the higher quality of goods of our manufacture, and while our customers are apparently not stocking up to any great extent, they are buying liberally for their current needs. Prices in our line have increased during the past year about 15 per cent., and judging from the conditions of the future, market prices on most of the materials entering into the manufacture of varnish, there is but little possibility of any decrease in price for at least the next six months or a year.

Our export business is developing rapidly, we having but recently started soliciting this class of business, and the results so far have greatly encouraged us in making the extensive additions to our plant mentioned above.

We anticipate the next year of having a large increase in our business, and our manufacturing facilities are such as to be adequate to keep pace with even a very much larger increase than we anticipate.

DEMAND TO TAX MANUFACTURING FACILITIES

By Arthur D. Brown

Manager, A. Ramsay & Son Co., Montreal

In our experience, we have found experienced labor extremely hard to secure, and wages have been much higher. Raw materials in most cases have been very scarce and difficult to get, and there have been many complications in connection with general operation.

Under the trying conditions which we have just experienced during the war and since the armistice, we are very pleased to report that there has been a steady increase in business since 1912, each year being in excess of the previous one.

Even at the higher prices goods have had to be sold at, the demand has been for the better quality of goods, and it has been a question of getting the materials to produce goods of the right quality to satisfy the trade in general.

Re export business, we might state that ever since the armistice, export had practically ceased, owing to the fact

(Continued on page 276)

Pianos, Organs and Musical Instruments

INCREASED production is reported by most manufacturers and still larger production in 1920 is predicted. Some shortage of labor is noted but the greatest difficulty appears to have been in connection with materials, which have been hard to obtain. The market for all kinds of musical instruments has been strong and higher quality goods have been in request. Noteworthy has been the volume of export business offering, particularly in pianos. Manufacturers have done the best they could to meet this demand but are behind on orders. The outlook generally is satisfactory with good business, both at home and abroad, in prospect.

NOW SHIPPING TO MANY COUNTRIES

By Owain Martin

President, The Martin-Orme Piano Co., Limited, Ottawa

Manufacturing conditions were more difficult at the beginning of the year probably than ever before, mainly through the demands of labor. Raw materials have been at times almost impossible to secure, especially in semi-manufactured lines. These conditions have gradually improved; labor seems more settled, and easier to get, and our men not shy in regard to production. At the present moment we are again finding it hard to get stock, particularly in metal goods at all promptly.

Our production will average 50 per cent. increase over last year.

Export business has recently been taken up by us, and we are shipping now to Great Britain, France, Belgium, New Zealand and West Indies.

We have recently made considerable enlargement of our factory to accommodate the manufacture of Grand pianos. We see nothing on which to base forecasts of future trade conditions. Much will depend upon the extent of the disturbance of existing conditions following the notable accession of the farmers to power.

OUTPUT LIMITED BY LABOR SUPPLY

By W. N. Manning

The Sherlock-Manning Piano & Organ Co., London

To go back as far as 1914, we were able to keep our full staff employed through 1914 and 1915, never laid a man off, but some went to the war. Then in 1916 one-third of the remaining men joined up, and from that date to this we have been short on labor. In 1917 we introduced girls into the factory, and we still have several of the first girls who started. They have made good and are now considered a fixture in our factory. About one-half the men who went to the war have returned to us. Two were killed; others, who returned, do not appear to want to come back into factory work. Output is now limited to the labor we can get and, as it takes fully two years to educate a man in the particular piano branches, we cannot take advantage of the ordinary help that is offered.

We have had no labor troubles. We have advanced wages in line with increased cost of living and have kept our help well satisfied. They are, we believe, doing their best to give us an output. As a Christmas present we are taking out a group insurance policy and giving each man a policy of from $500 to $1,000, according to time in our employ.

We have had more trouble in the past six months getting raw material than at any time since the war started, and in order to be assured of having our requirements, we have to carry heavy stocks.

Output has increased 25 per cent. over a year ago, and this year's output, we believe, will be between 20 per cent. and 25 per cent. more than last years, in fact we are now about normal.

The tendency of the customer is to buy the high-grade piano. The Canadian public is becoming more artistic in its taste, and is demandng qualty in both tone and design. Marketing conditions were never better. Terms have been shortened, and many dealers who previously asked for long terms are taking the discount and paying cash.

We have always done a little export business, and it has gradually increased. We now have orders for a considerable number of instruments which we are unable to ship owing to the home demand. We have taken care of our export orders fairly well and expect to have the present ones all cleaned up in January. Previous to the war, organs only were exported, but during the war they had to buy pianos. Before, our foreign customers would not pay the price for Canadian pianos, but they now realize the quality warrants the price and we believe they will continue buying even though a lower-price piano may be offered from Europe. The outlook never seemed better. We see no sign of any let-up in the demand, and were we assured of labor we would immediately enlarge our plant.

SITUATION BETTER THAN YEAR AGO

By Henry H. Mason

Mason & Risch Limited, Toronto

There has been considerable difficulty through the year in getting adequate supplies of the raw materials that are required, but the chief problem has been and still is, to get a sufficient number of first-class mechanics to permit of a really satisfactory output. The situation is considerably better than a year ago, as a number of the men who left piano factories to work in industries engaged in the production of munitions and aeroplanes, have returned to their old positions. It has, however, not been possible yet to get the factory output up to a number of the pre-war years.

The demand to-day is for the higher priced styles. In fact it is really most encouraging that this should be the case, in view of prices necessarily being considerably higher than those that formerly prevailed. As to export business—the demand for Canadian instruments from abroad is very active, and is evinced not only by letters that are constantly received from many countries, but by personal calls from those representing companies in Australia, New Zealand and other distant sections. It is unfortunate that industrial conditions are such that only a small part of this demand can be given attention.

As to the future outlook this certainly can be regarded as good. In addition to the active demand both from the home and outside market, collections were never better. If the improvement in manufacturing conditions that has taken place during the present year continues, it should be possible next year through increased output to do a considerably in-

creased volume of business. As to factory enlargements this is not a problem that concerns us for the immediate future, as our first care is to build up a staff that will give us the benefit of the capacity of the present plant.

LOSING EXPORT BUSINESS

By C. A. Bender

Heintzman & Company, Limited, Toronto

Conditions of manufacturing have been very difficult. It has been hard to get men and keep them, on account of labor conditions and constant increase in prices. Raw materials show very high increase in cost, but there has been an increase in production over 1918 of 25 per cent. Market conditions are good. For the last year export business has been good, but we have been having orders cancelled on us lately owing to constant increasing cost of manufacturing plus traffic conditions.

GENERAL REVIEW OF PIANO INDUSTRY

By H. P. Bull

Vice-President, Williams Piano Co., Limited, Oshawa

We have had no trouble of any kind through discontent in our labor. We started operating a forty-nine hour week about the beginning of April of the past year on the old standard of sixty-hour a week pay for those who are not working on piece work, but retained the same scale on piece work labor. We had a general understanding with the foremen of our different departments in conference, that in granting the forty-nine hour week they were to hold the output up and, if possible, increase the output with such facilities as we would give them in new machinery.

We necessarily have to employ at least 85 per cent. skilled labor, and would have difficulty in getting more skilled labor if we had required it in any excess.

It may be of interest right here to state that before the year 1914 we were employing 225 men for the manufacture of about eight pianos a day, which seemed to be all that we could produce. The war took away a number of men from us and we have been operating with 200 men and have succeeded in practically doubling our output by the men becoming much more efficient—the result of which has increased the earning power of the men to almost double what it was before 1914.

The production during the past year has increased about 10 per cent. over the previous year, the increase being controlled to a great extent by our inability to get a greater quantity of supplies.

The requirement for instruments has a tendency toward player pianos and, in addition, our higher-priced pianos. The demand throughout the entire year has been perhaps 25 per cent. greater than we have taken care of. The demand could have been increased much beyond 25 per cent. had we put forth efforts to obtain a larger amount of business, but we have curtailed actual solicitation of business to almost a minimum. Our wholesale prices have increased about 30 per cent. in the last twelve months.

In the export business we have been making a most careful effort to build up a very permanent trade connection, and in doing this we have enlisted the services of three export companies, giving them different territorial rights throughout the British Empire, Europe, South America, China, Japan and Asia.

We have been doing some development work in regard to sending sample orders to quite a number of foreign dealers in addition to which we have some substantial connections to whom we are making regular shipments.

We had some difficulty in previous years in the export business by endeavoring to build a piano in size, design and method of construction at low prices, but the results of that effort did not prove satisfactory as we could not make pianos cheaply in this country and have any merit to the quality that would be a credit to the Canadian manufacturer and would have any tendency to build up a permanent demand and respect for the product. Therefore, we discontinued special designs of cheap pianos and decided to advise the export trade that they would have to take our standard quality of goods and pay the standard Canadian prices. We are pleased to state that this method has proven most satisfactory, and we anticipate a splendid foreign trade connection and are already considering ways and means of taking care of the demand, which at the present time is all that we are able to supply and at the same time give service to our Canadian dealers.

The outlook for increased piano business we figure on a ratio of percentage per population, and we have found that this percentage has increased by the enforcement of prohibition, which has created more possible purchasers.

We have every reason to believe that the demand for musical instruments will continue, and although there may be some occasional reversals in the demand, the requirements of music in the home—particularly a piano—is becoming a more established necessity every day for the education and welfare of the family rather than as a luxury, which our Government usually considers a piano to be every time there is a little flurry in the market as regards the national supplies. We are making plans for factory extensions and may erect 25,000 feet more of factory this year.

FIFTY PER CENT. LARGER OUTPUT

By J. W. Alexander

The Dominion Organ & Piano Co., Limited, Bowmanville.

Our experience is that manufacturing conditions have been very unsatisfactory as regards labor and raw materials. There is no scarcity of unskilled labor. What we have suffered from, and we presume the other manufacturers as well, is the scarcity of skilled labor, such as cabinet makers, etc. Raw material, such as lumber, steel wire, etc., has been very hard to obtain, and at greatly increased prices. Lumber has more than doubled in price within the twelve months. Notwithstanding the above drawbacks, production has been well maintained, and increased in some cases. Take ourselves for instance, our output will be at least 50 per cent. ahead of what it was a year before, when we complete the twelve months at the end of December.

The demand has been for high quality instruments. The price seems to be no obstacle. All standard pianos and organs have been in great demand throughout the year.

Export business has been offering very freely, and we have now large orders on hand for England, South Africa and Australia, but the great drawback is the excessive ocean freight rates, which are ten times what they were in pre-war days. In our opinion, there is no limit to the export business that could be done if a reasonable rate of freight was demanded.

The outlook is encouraging and we see no reason why the demand should not keep up. The difficulty will be to supply the demand, in our opinion, on account of the peculiar conditions of labor. We have no plans for factory enlargement, as it would not be wise when skilled labor cannot be got to adequately man our present factory.

BIG INCREASE IN GRAMOPHONE OUTPUT

By C. H. Weicker

Brunswick-Balke-Collender Co. of Canada, Limited, Toronto

During the year just closed we have had a lot of difficulty getting the experienced labor we required, and it was necessary for us to educate a large number of men. Raw materials have been at times difficult to secure and this has

(*Continued on page* 276)

The Canadian Pulp and Paper Industry



Two of the Big Newsprint Machines of the Laurentide Co.

REPORTING on conditions in the Canadian pulp and paper industry, manufacturers are practically unanimous in their belief that this great industry has now become established on a stable and profitable basis. Expansion is general with capacity almost everywhere on the increase. The demand for pulp, paper and paper products has been growing steadily throughout the year and has now reached proportions that are beyond the capabilities of present capacity to supply. Particularly is this true of newsprint, which is in extraordinary demand at advancing prices in both the United States and Canada.

Manufacturing conditions during 1919 have been fairly satisfactory. The labor situation has apparently become better stabilized, though here and there some manufacturer reports a state of uneasiness and uncertainty. Raw materials have been scarce and high in price, with some complaints as to inferior quality, due to the rush of production. Transportation problems have not been a serious factor except in one or two localities. As for climatic conditions these have been on the whole quite favorable.

Capacity is Being Enlarged

Production has been on the increase with promise of considerably larger production in 1920 and 1921. There is scarcely a mill which does not report increased capacity either in effect during the past year or in prospect for this year, the increase extending all the way from improvements to and extensions of present plants to the construction of new mills. The enlargement is in keeping with the demand which on all hands is reported to be enormous. Mills are sold months ahead, while in the newsprint field famine conditions are freely predicted unless consumption is curtailed.

The export field, apart from the heavy shipments of newsprint to the United States, has not been a very conspicuous factor on account of the difficulty experienced in meeting domestic demands. There would be no difficulty whatever in securing export orders, were manufacturers in a position to make shipments, but this has not been the case and the business has been confined to a few mills. It is rather unfortunate that more paper is not available for overseas shipment as now is the time to gain a foothold in these markets.

Gratifying progress is reported in the matter of reforestation and conservation of the timber resources of the country. This is a most important matter, for on the continued supply of wood must depend the future of this great and growing industry. Quite a number of the larger companies have now established forestry departments and are going in for a vigorous policy of protection, selection and planting.

In the following reports received from several Canadian manufacturers, first-hand information on conditions in the industry will be found. These, taken collectively, will give a very good idea of the present situation and outlook in this important field.

OUTLOOK REGARDED AS GOOD

By G. Chahoon, Jr.
President, Laurentide Company, Limited

Labor conditions in this section of the country have differed but little from those of other portions of the Dominion. We have had a shortage of labor, but no apparent unrest. The supply of raw materials for manufacturing purposes has been about normal; some manufacturers, ourselves included, have been rather short of wood this year, owing to scarcity of men for drives last spring. We have had no difficulty with inland transportation. We have, however, experienced the same difficulty as all other export shippers in obtaining space for the overseas market.

Our production is about normal. Owing to the scarcity of paper and the demand for same, the mills have been pushed to their utmost capacity and show an increased production for the year of a few per cent. We have made no enlargement in the plant, but have plans under way to put in two additional paper machines, which should be ready for operation by January the 1st, 1921.

There has been a very strong demand for pulps and papers of all kinds, due very largely to the enormous amount of advertising being carried on by the metropolitan papers. The prices of newsprint paper are controlled by the Government as they also are in the United States. Many publishers in the United States have deemed it advisable to waive their rights under Government regulations and pay fair market prices. There has been a strong demand for newsprint paper from all of the foreign markets. The amount that our company has been able to ship has been governed very largely on our ability to get steamship space.

The outlook for the coming year is good both as regards production and distribution. There is a substantial shortage at the present time, due to the numerous demands made by the larger publishers, but there are machines in the process of construction which should make up this shortage within

the next twelve months, that is if there would be no business depression that would curtail the consumption. I consider the industry in rather a precarious position, due to unprecedented prosperity. I fear that this prosperity may lead to more speculative plants, which in normal times will not be able to operate successfully.

The Laurentide Company has been developing nurseries and planting trees for the past six or seven years. Our nursery capacity this past year was about two million young trees. These were planted on lands near the mill. I sincerely hope that the Quebec Government will continue its very wise plans of conservation and in the near future develop some co-operative plan of reforestation whereby it will be just and fair for the Government to require that a new tree shall be planted for every tree cut down or destroyed.

PRODUCTION HAS BEEN INCREASED

By Geo. H. Millen
President, The E. B. Eddy Company, Limited

We have had to reduce our hours of labor to eight hours but notwithstanding this, labor seems to be just as restless as ever. We have had no difficulty in getting all the raw materials that we require. We have had some little trouble in getting all the cars that we wanted, but on the whole, conditions have been very satisfactory. The climate during the present year has been very favorable for the pulp and paper industry.

Our production has increased from 2 to 5 per cent. during the year just past. We have enlarged the capacity of our toilet and tissue department, but no other enlargement is in contemplation at the present time. We sell almost our entire output to our home Canadian trade, that is, with the exception of an occasional car which we export.

It is pretty hard to say what the conditions are going to be for the next few months. In our opinion one man's guess is about as good as another's.

We have been considering the conservation of our wood resources for some little time, but nothing definite has yet been done.

LABOR INTRODUCES UNCERTAIN ELEMENT

By E. W. Backus
President, Fort Frances Pulp & Paper Company, Limited

Manufacturing conditions, with reference to help, are very unsatisfactory. Wages are high and labor inefficient. Raw materials are scarce and high, although we have been able to secure our requirements up to this date, at some price. Transportation is very unsatisfactory; cars for loading are scarce. Climatic conditions are unsatisfactory for forest products operations.

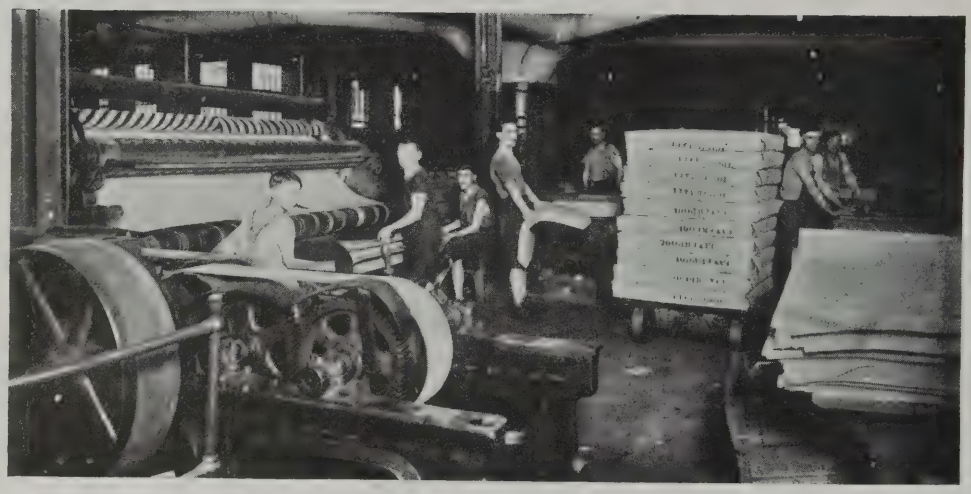
We have not been able to increase our production; on the contrary, the opposite is true. Our output to-day is approximately five to seven per cent. lower than it was a year ago. We have not enlarged the capacity of our plants and do not feel that conditions justify that step at this time.

The price of ground wood pulp is very high and strong; sulphite and kraft pulp is easy with supplies ample. Both newsprint and kraft paper are high and strong and will remain so for sometime to come. The business outlook is good, but production will be reduced on account of labor conditions, unless there is a marked improvement in that



A Comprehensive View of a Canadian Paper Mill

This is the Espanola Mill of the Spanish River Pulp & Paper Mills, which has recently been considerably enlarged to admit of the installation of two new machines



Scene in the packing room of the Laurentide Co. at Grand Mere, P.Q. Here paper is being cut and packaged up for shipment to Liverpool and elsewhere

element. However, we look for good business for several months to come.

We do not feel that industry is on a sound basis, as there is too much uncertainty ahead of us in the direction I have mentioned, viz., labor. However, in both paper and lumber, prospects are favorable for some time to come. In my opinion the business future largely depends upon the action of Congress, in the United States and Parliament in the Dominion of Canada. If they take hold of matters in the proper way it will go a long way towards stabilizing the situation.

COMPANY HAS DOUBLED PRODUCTION

By C. Howard Smith

President, Howard Smith Paper Mills, Limited

Production has been considerably increased; so far as we are concerned our production is over double what it was a year ago. At the present time we have almost completed the doubling of our Beauharnois plant and figure on increasing the production of our Crabtree plant by 80 per cent. The work on the Beauharnois plant will be finished about the first of January and that on the Crabtree the first of May. We have also taken over the Toronto Paper Company and propose to increase the production of this plant 25 per cent.

The market is strong with trend of prices bound to be upwards. Export trade has been very satisfactory. We have exported to a great many countries, and our goods have been well received. We have had repeat orders, and a portion of the increased production is to take care of this trade. We expect a continued strong demand for paper. With the organization and re-establishment of industries generally, the demand for paper is very heavy and will continue so for some time. We certainly regard the industry as stable, and on a profitable basis. The plants in Canada are in good shape, have been well managed and this should be one of Canada's best businesses.

CONDITIONS IN EXPORT FIELD

By A. E. Cadman

Statistician, Canadian Export Paper Company, Limited

While the exports of newsprint paper, in which we are chiefly interested, have increased very greatly in the last few years, these exports have been principally to the United States. At the present time there is a "famine" condition in the United States in the newsprint market and unless drastic measures are taken it is almost certain that many of the smaller publishers will be forced to close down. This means that the bulk of Canadian newsprint will be sold to the U. S. A. in 1920, and comparatively little will be available for overseas markets. At the same time many manufacturers are endeavoring to maintain their overseas connections, even although they cannot supply all the needs.

The outstanding fact in connection with the newsprint industry at the present time is that production has not kept pace with the demand. Both in Canada and the United States, especially the latter, restrictive legislation during the war period has had the effect of keeping capital out of the industry and, consequently, production lags a long way behind the demand. An advance of at least 35 per cent. in the consumption of paper in the States has led to the present shortage.

By the end of 1921 it is expected that the production of newsprint in Canada will have increased to about 2,000,000 tons per annum and for the next two years, at any rate, it is probable that a shortage of paper will persist.

INCREASED TONNAGE ON THE WAY

By L. R. Wilson

Secretary, Abitibi Power & Paper Company, Limited

Labor conditions with us since May, 1919, at which time we entered into an agreement with the Unions for the following year, have been more stabilized than formerly, as regards the men regularly in our employ. The supply of floating labor, however, while more plentiful than during the war, has not been sufficient at all times for our needs. We have had no trouble getting all the raw material we required and transportation facilities, with the exception of isolated cases of a few days, have been normal.

Our production has not increased during the past year and is to-day practically the same as a year ago. We have under consideration an increase in capacity in our newsprint production of approximately 85 tons per day, to come on the market in the latter part of 1920, and an additional capacity of a like amount to be ready in the early part of 1921.

The tendency of the market price for paper has been a gradually increasing one during the entire year of 1919, which has been caused by the extremely heavy demand and lack of sufficient tonnage to meet that demand. In sulphite news pulp there has been little variation in prices during the year 1919, but this is not true of groundwood pulp as same has increased in value during the past month about 100 per cent. with the demand very heavy. Owing to the

demand for paper for next year's consumption, it appears to us that all the production in Canada can be readily taken care of during the entire year.

The business at the present time is on a stable basis and will probably continue so for some time to come. The chief factor contributing to the extreme shortage of newsprint effective at this time is probably on account of the control assumed by both the Canadian and U. S. Governments immediately after the outbreak of the war, with the result that there has been no increase of production in newsprint during the past four years, and with the increased consumption on account of the war and other causes has resulted in there being an insufficient amount of paper to meet the requirements of the trade.

We have during the past year organized a re-forestry department through which we propose to replant yearly an amount of wood equal to that cut, with the idea of eventually reproducing a sufficient amount for our continual use. It is too early as yet to give results from our actual experience but we are satisfied that spruce wood can be reproduced to advantage in our vicinity.

ANTICIPATE FURTHER IMPROVEMENTS

By R. H. Ecclestone

The Rolland Paper Company, Limited

With respect to labor we have had very little difficulty. Raw materials have not only increased in price but have been very hard to secure and have been unreliable. This refers to both rags and sulphite pulp as well as chemicals and dyes. We have not had any great difficulties in connection with transportation.

The last six months has seen quite an increase in production, which is a result of splendid demand and the fact that many additions and improvements in machinery and equipment at our mills have been made. We anticipate further improvements to our present mills to increase our output.

With regard to export trade there has been practically none of it during 1919, whereas there was quite a lively business done in 1918. This is due mostly, we think, to the fact that those countries buying during 1918 bought very largely and have practically been out of the market during the present year. We believe that as shipping facilities and the exchange situation improve, export demand will also improve. It appears to us that the future of Canada's export paper trade should be bright.

Although the mills at present are more than taxed to their capacity to fill orders and there seems to be no likelihood of the demand falling off in the near future we consider the present demand abnormal and we feel that the capacity of the mills at present is sufficient to take care of a normal demand.

Money invested in the manufacture of high grade paper in Canada is only a small percentage of the total investment in the industry in Canada. Nevertheless, the production of high grade papers has increased to such an extent that there is practically nothing but Canadian made bond, ledger and writing papers used in Canada, and a certain amount of export has been done. The reverse was true a very few years ago when the market was flooded with English and American papers and the consumption of Canadian made papers was small.

MACHINES RUN TO CAPACITY

By F. J. Campbell

General Manager, Canada Paper Company, Limited

We have found labor, raw materials, and transportation during the past year all uncertain and expensive, though climate in this district has been all that could be desired, there being an excellent flow of water throughout the year. There has not been any material increase of production. Machines have been run to the limit of their capacity. The market has been steady and firm, the general trend of prices upwards, with a very active demand for all products. Our company has been in the export business for many years. Export business is still hampered by the uncertain conditions of shipping.

As underlying conditions are still abnormal, we don't believe it is possible to predict what will happen within the next few months. The pulp and paper industry in Canada has long been on a stable and, for the past few years, on a profitable basis owing to our possession of raw materials and good water power.

SCARCITY OF PAPER TO CONTINUE

By H. F. E. Kent

President, Kinleith Paper Mills, Limited

The labor element has been very uncertain. At the present time, however, we are able to get all the help we require, our advance in wages being about 110 per cent. over prewar days. Raw materials at the present time are scarce. While sulphite, the main raw material used in paper making, has been greatly increased in production, the quality has not been as good as it should have been. We hope, however, that once the mills get down to more normal conditions and



A huge paper machine under installation at the Espanola Mill of the Spanish River Pulp & Paper Mills. This machine, which started running on October 20, has a speed of 700 feet per minute.

are not rushed, that they will produce a better article. In fact, it has improved greatly in the last six months. The transportation situation from our own mill has been very reasonable, and we have no complaint to make on that score.

Our production has increased about 15 per cent. since 1914. This has increased through improved facilities and methods of handling the stock. Our output, however, is on about the same basis as it was this time last year. We have not enlarged our output but we have put in considerable additional machinery to enable us to improve the quality of our papers and the finish.

With regard to the demand for pulp and paper, in the early part of the year some of the mills were idle for part of the week. Our own mill, however, was kept running full, in view of the fact that we had sufficient export orders on hand to permit us to do this. In view of the fact that the demand for pulp and paper was easy, prices of the raw materials were down, but they started increasing about the middle of the year and have been going up ever since. The demand for paper is at the present time abnormal and we ourselves are refusing to accept any more orders at fixed prices, as we are sold up from three to four months ahead.

Our export business has been very satisfactory as far as we have gone with it. Not being a large mill, we have not, of course, gone into it to such an extent as we would have otherwise. At the present time there is such a demand for paper that there is no difficulty in getting export orders if one should want them, and you can almost get them at your own price.

We believe, for the next few months, that there is going to be as great a scarcity of paper as there was in the year 1916, when it was almost impossible to get one's requirements. The paper mills in this country, as far as I have been able to judge, and I try to keep in close touch with them, are on a stable and profitable basis and are all well managed, and we are looking forward for the paper industry to have a great future.

INCREASED PRODUCTION BY TWO-THIRDS

By Large Manufacturer

The labor situation has been satisfactory except for shortage of men for logging. Conditions surrounding the supply of raw materials and transportation conditions have been satisfactory. We have increased production by two-thirds. In the first half of the year we experienced a dull market but the market has since been keen and there has been a rise in prices. All papers are scarce, especially printing paper, both book and news. Canada has lower cost pulp than Europe and the pulp and paper industry should develop and the grade of its products should improve. The industry is now coming into a stable and profitable basis and has as advantages ample cheap power and wood. New plants embodying the best manufacturing practice will help and the technical side of the industry is important.

PULP AND PAPER EXPORTS EXPAND

By EDWARD BECK

Canadian Pulp and Paper Association, Montreal

A REVIEW of the exports of Canadian pulp and paper for the first nine months of the calendar year 1919 shows a net gain in value of $10,420,441, as compared with the corresponding period of the preceding year. The gain is wholly attributable to paper and paper products, the value of the exports of both chemically prepared and mechanically ground pulp having fallen off from last year. A summary of the returns issued by the Statistical Bureau at Ottawa discloses the following for the period under review:

	1918.	1919.	Gain or Loss.
Paper and mfgs. of	$32,022,265	$42,884,409	$10,862,144
Pulp, Chem. prep.	20,402,118	20,160,294	241,824
Pulp, Mech. ground.	3,624,514	3,424,635	199,879
Totals	$56,048,897	$66,469,338	$10,420,441

Exports of unmanufactured pulpwood for the period amounted to $8,881,810 or a decrease for the latter year of $2,050,750. The falling off in exports of wood is regarded as a favorable factor in the progress of the industry indicating a determination to utilize a greater proportion of its raw materials in home manufacture.

The United States continues to be Canada's best pulp and paper customer, with the United Kingdom, Australia, Japan and New Zealand following in the order named. The following statements give the principal importing countries and the value of their imports of Canadian paper for the first nine months of 1918 and 1919 respectively:

	1918.	1919.
United Kingdom	$796,405	$2,333,953
United States	27,061,043	33,843,474
New Zealand	672,379	429,243
Argentine Republic	201,729	441,150
Australia	2,049,867	2,158,544
British South Africa	190,876	351,678
Chile	16,301	17,138
Newfoundland	126,581	97,517
Peru	3,280	66,553
Brazil	69,601	33,196
China	29,503	42,909
Cuba	10,952	43,174
France	100,676	
India	37,897	26,950
Japan	189,661	172,858

The prospects of the industry for the coming year are regarded as exceptionally good, particularly for the production of printing paper, the demand for which continues greatly to exceed the supply. Many of the existing companies are enlarging their plants to take care of the extra demand and a number of new mills are either projected or are under actual construction. Of newsprint paper alone, Canada is now producing approximately 800,000 tons a year. If all the expansions now under way or projected are carried through to completion the next two years should see this output increased to 1,000,000 tons, with a production of pulp and other grades of paper to correspond.

CANADIAN MILLS TO GET BIG BUSINESS

By Newsprint Manufacturer

A very substantial increase in wages was granted to our employees in May, 1919. No further demands are expected until spring of next year. Raw materials have been somewhat more easily obtainable than during the last two or three years, but, on the whole, the prices have been advancing steadily. There has been some trouble from car shortage, but it has not been acute. The weather has, during the whole year, been favorable to operating conditions in this industry. As far as this particular firm is concerned, production has increased by about 10 per cent. in 1919 over 1918. The market price for newsprint paper has been controlled, both in Canada and in the United States, so that it is difficult to say what the tendency of the market would have been had this control not existed. It is expected that this control will shortly be relinquished and, as there is a great shortage of newsprint paper, both in Canada and in the United States, the market price of this commodity will tend markedly upwards and will bring the selling price more in line with the manufacturing costs than has been the case lately.

The outlook for the next year is, that, whilst production in the industry, as a whole, will be increased, due to some new machines coming into operation, it is wholly improbable that this increase in production will take care of the great demand, unless some measures are taken looking to a curtailment of the consumption of newsprint paper. I regard the pulp and paper industry as now thoroughly established in Canada and, as far as groundwood pulp, sulphite pulp, sulphate pulp, pulp boards and newsprint paper are concerned, I expect to see the Canadian mills in possession of the bulk of this business for this continent within a few years, this being due to the probability of the further development of our natural resources in standing pulpwood.

The Rubber Manufacturing Industry

EXPANSION in the manufacture of automobile tires has probably been the outstanding feature of the rubber industry during the past year. Factory enlargements have been taking place on a large scale which will give a very greatly increased capacity in the near future. So far as staple lines of rubber are concerned, production has been about normal, with increases in some lines and decreases in others. Manufacturing conditions have been fairly good, though there is a certain shortage of help, and cotton, which is an important raw material in tire factories, has been in short supply. Both in the domestic and export fields demand has been strong and manufacturers look for continued activity during the current year.



Washing Crude Rubber

CONSIDERABLE EXPORT BUSINESS OFFERED

By Kaufman Rubber Co., Limited

Labor and material have been expensive and scarce, and general operations consequently difficult. Our production has increased according to our ability to secure labor and raw material. We find that there has been no change in the demand for the kind and quality of our lines except for slightly better quality. Market conditions have been good.

Our home trade has been good, and on this account, we have been unable to consider much export business. Considerable export business has been offered. We believe most Canadian manufacturers can take care of home trade and some export business, which may last until Europe is able to manufacture sufficiently for home consumption. We are rather anxious to know if the lowered rates of exchange will cut off this export business earlier, as our plans for factory enlargement depend somewhat on the possibility of export business continuing for several years.

ANTICIPATES 100 PER CENT. INCREASE IN SALES

By F. E. Partridge

President, The F. E. Partridge Rubber Co., Limited, Guelph

We have no difficulty in securing all the male help we require. We are, however, not so fortunate with female help. We are running continuous advertisements in the local papers, as well as outside points, but at no time are we able to secure more than 50 per cent. of our requirements.

We have been able, up to this writing, to obtain all the raw materials needed to keep our mill operating. There is, however, at the present time a general shortage of long staple cotton, such as used for tire manufacture, with no immediate relief in sight.

We are increasing our production continually and anticipate our sales for 1920 will be 100 per cent. over the year just closed. We have just taken on considerable export business and our prospects are very bright in this direction. We anticipate all the business from overseas that we shall be able to handle and still at the same time do justice to our domestic jobbers. I can see no reason for a falling-off in business in our particular lines for some time to come, and I have no doubt that the rubber manufacturers of this country will take all necessary steps to increase their plants to keep up with the ever-growing demands. We have just completed an extension to our tire plant, which is now in operation and which will increase our production 100 per cent.

I have recently organized "The Northern Rubber Company, Limited," for the purpose of manufacturing a complete line of rubber footwear, which will bear the "Partridge" brand. This building is now completed and the machinery is being installed. Production will begin about February 1, 1920.

CONDITIONS IN THE AUTO TIRE INDUSTRY

By H. C. Lower

General Sales Manager, The Goodyear Tire & Rubber Co. of Canada, Limited, Toronto

Due to the fact that automobile manufacturers could not get sufficient materials for automobile production, there was practically no increase in automobile tires produced during 1919 over 1918 for the original equipment of new automobiles. The volume of automobiles in use took just about one-third more tires than during 1918. The lack of increase in original equipment business was more than offset by the materially increased export business.

I should say that the total automobile tire production of Canada increased at least 40 per cent. in 1919 as compared with 1918. Larger production on exports was prevented only by the necessary delays in getting machinery and equipment from the factories, who for several years before were working largely on war materials. The delays to some extent were also produced by strikes in the steel industry. Aside from this, automobile tire production was very slightly interfered with by labor conditions.

The working conditions for labor on automobile tire production are good. The social service work done by automobile tire manufacturers for employees is apparently more

extensive and practical than that done by most any other industry.

The supply of coal and cotton are the most difficult problems of the day. The coal situation may be only temporary, but the cotton situation will last at least for a year and likely for several years due to the shortage of production.

The Sea Island cotton crop of the Southern States was very small on account of the boll weevil. With the exception of the recent growths of cotton in Arizona, this Sea Island cotton produced the best duck for automobile tires. The Egyptian cotton makes a good quality of automobile tires, but there is not nearly enough of it to relieve on the shortage of Sea Island, and on account of strikes by coal miners and longshoremen, the movement of Egyptian cotton which was available, has been delayed.

Many of the newer and smaller automobile tire manufacturers will likely find it impossible to get enough good cotton to produce the quality of automobile tires necessary to their success and growth. There is every indication that for 1920 the demand for well-established brands of automobile tires will equal, if not exceed the supply. This is especially true of the companies who have developed a good demand in the foreign fields. The increased demand for tires in Canada has been quite uniform over all of the provinces.

The Canadian automobile tire production for 1920 should give employment to at least seven or eight thousand people at wages that would comfortably support the average size of family. It is interesting to note in this connection the way the Canadian automobile tire manufacturers have conducted themselves under the protective tariff. There is a tariff of 42½ per cent. on automobile tires. We are paying duties on our factory equipment, coal, cotton, in fact practically everything we use, and still are selling popular sizes of tires to the Canadian public at prices from seven to fifteen per cent. higher than the price of like tires in the United States.

It is this policy that makes it possible for the automobile tire industry of Canada to employ so many people. With these fair prices established by Canadian tire manufacturers and the high tariff on importation, only a very small percentage of the tires used in Canada are imported. Without this combination of conditions, there would be about two or three hundred brands of automobile tires manufactured in the United States receiving a share of the Canadian business, which would make it impossible for any Canadian manufacturer to build a production which would be worth mentioning

COST OF PRODUCTION MUCH INCREASED

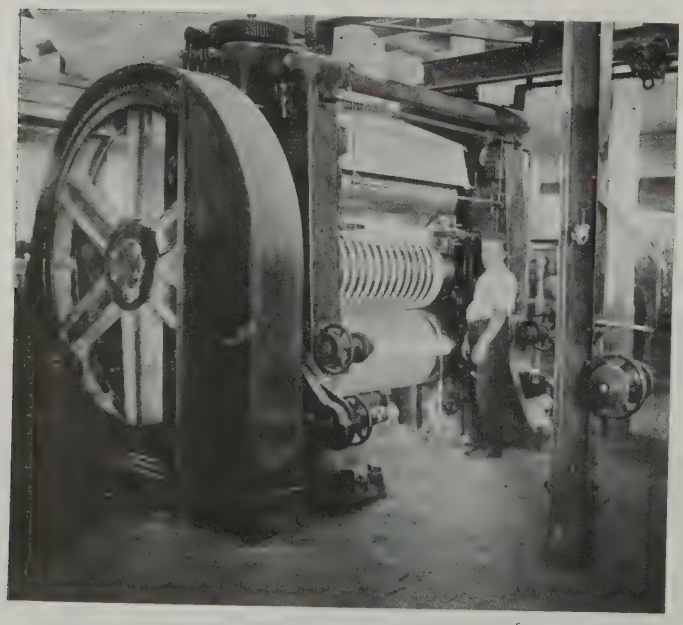
By Ontario Manufacturer

We have found that manufacturing conditions in the rubber industry during the past year have been very much disturbed as regards labor. Very persistent attempts to unionize the industry have been made but thus far these attempts have not been very successful. Wages have been increased two or three times during the year without corresponding advance in selling prices of the products. Shorter working hours with increased pay have diminished the per capita output and materially increased cost of production. Raw materials, especially cotton textiles, have been very difficult to obtain and high in price.

In certain lines production during the year has increased over preceding year and in other lines has decreased. Among the latter are included those goods regularly supplied to industries which were affected by the cessation of hostilities and re-adjustment of business conditions.

The general demand has been for goods of high grade rather than simply lowness of price. The buying public are growing to realize that the best goods obtainable in the rubber line are cheapest in the long run. Selling prices have not kept pace with increased cost of manufacture and expense of marketing products.

Opportunities for doing export business have materially increased both because of foreign demand for the goods and easier shipping conditions. The outlook is quite uncertain. Rubber goods such as this Company manufactures are not articles of luxury and the demand for them depends entirely upon general business conditions, modified so far as rubber footwear is concerned by seasonable or unseasonable weather conditions.



Calendaring Side Wall Stock



A Battery of Tire Buffers

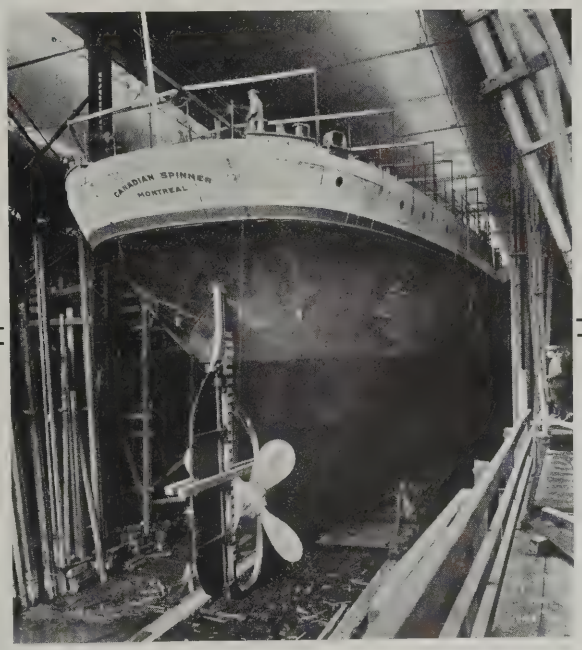
Photos by courtesy of The Goodyear Tire and Rubber Co., of Canada, Limited

Progress of the Shipbuilding Industry

SHIPBUILDING in Canada has been actively prosecuted during the past year, principally in connection with the building of ships for the Canadian Government Merchant Marine. There are still quite a number of these Government ships to be completed and work on them will keep the various shipyards busy for the greater part of the present year. Shipbuilding companies are somewhat doubtful as to what will happen after the Government orders are filled and in some quarters the granting of a subsidy is suggested so that the industry may be stimulated. Most builders agree that some form of Government aid will be necessary if the industry is to continue to prosper.

Operating conditions have been more favorable on the whole than in the previous year. The efficiency of the workmen is increasing and materials have been in better supply. Costs have advanced but still compare quite favorably with costs in Britain and the United States. It is believed that, were it not for the dislocation of exchange, a good many orders for ships would be coming to Canada.

A recent statement from Ottawa shows that Canada has 20,000 shipbuilders and $47,000,000 capital invested in the industry. The expenditure in wages is estimated at $42,000,000 a year.



A Canadian-built Freighter just before Launching

Photo by courtesy of Canadian Vickers Limited

GOVERNMENT ASSISTANCE IS NECESSARY

By L. McMillan

Supt. Shipbuilding, N. S. Steel & Coal Co., Ltd., New Glasgow

Our experience is that the supply of labor is ample, principally on account of the eastern car plant being closed and the steel company working only about 50 per cent. capacity, although there always seems to be a shortage of skilled labor in certain trades, such as boiler-makers, platers, coppersmiths, and men familiar in general with the equipment on board ship.

We have no difficulty in supply of raw material, except that delivery is sometimes slow. It seems to be harder to get delivery when plants are working half-time than when they are working full capacity. With plate mill at Sydney in operation, we should have no difficulty in getting prompt delivery of plates. We have always had more or less trouble in getting fittings, such as boiler mountings, engine-room auxiliaries, etc., in Canada. This difficulty, of course, is being overcome as the various manufacturers are becoming more familiar with owners and classification society's requirements.

Costs with us have decreased although average wages have increased, and in many cases cost of material and equipment. The reason for this is the more up-to-date methods of construction, such as joggling frames, more yard equipment, better organization and the men becoming more familiar with the work. There is, of course, still room for improvement.

Orders for ships are not as numerous as during the war. We have no enquiries from private ship owners in Canada, but we have sufficient Government work on hand to keep us working until July, 1920.

The future of Canadian shipbuilding in my own opinion, is not bright without assistance in some form from the Government, or unless costs in the Old Country are increased considerably. We cannot expect to obtain Government contracts much longer. Any assistance, therefore, we presume would be in the form of a bonus or subsidy. Government assistance might possibly take the form of financing boats built on speculation in order to keep a shipbuilding organization intact during dull periods, as this is most essential for Canadian shipbuilding; otherwise skilled men drift away when there is little or no work, and it is hard to get them together again. This difficulty is not serious, say, on the Clyde, where there are so many shipyards with skilled labor of every kind available.

We have finished the steamer *Watuka*, 2,400 ton deadweight, for ourselves, and expect to deliver *Canadian Sealer*, 2,800-ton deadweight, for the Canadian Government, this month (December). We have another steamer of the same size for the department nearly ready to launch. She will be delivered early next spring. We expect to lay the keel for another of the same kind this month. This ship is being built on speculation.

CONTRACTS FOR MOST OF YEAR

By P. R. Miller

General Manager, Canadian Vickers Limited, Montreal

The supply of labor is quite ample at the present time for work in hand. Efficiency of labor is as good as it has been in the past, and is gradually improving the longer the shipbuilding industry is kept going in these works. The supply of raw material is, on the whole, good, although the forecasted deliveries in steel and coal are not so good as they used to be. The only other important factor, so far as manufacturing conditions go, is the adverse action of exchange on the procuring of orders from Europe which decidedly mitigates against business. The cost of production has not increased during the year.

We have sufficient contracts in hand for new ships to keep us occupied until November, 1920. So far as our own works are concerned, we anticipate being busy on shipbuilding

for several years to come, provided labor keeps its head and does not boost wages, and also provided labor is prepared to recognize that as the cost of living comes down the cost of wages, which are at present abnormally high, should also come down.

The other factor mentioned above, viz., exchange, is undoubtedly having an adverse effect on the shipbuilding industry in Canada, and it would seem that the only way to overcome this in the meantime would be for the Government to assist the industry by some form of bounty or subsidy.

By the end of this year we will have delivered, during the season of 1919, six 8,350 ton cargo boats to the Canadian Government, one 8,350 ton cargo boat to French owners, and two 4,350 ton cargo boats to the Canadian Government. Of these, seven were launched during the open season of 1919.

We are now laying the keels, and construction has commenced on two 8,350 ton cargo boats for Norwegian owners, and two 8,350 ton cargo boats for the Canadian Government for delivery 1920. These will be followed by two other 8,350 tonners for the Canadian Government and two more cargo steamers for Norway. We have a promising enquiry for a small passenger vessel for foreign interests.

The above work is, of course, distinct from any ship repair work which we do during the open season of navigation on our dry dock, and other contracts which we take from time to time for the construction of boilers and ships' auxiliary machinery for outside parties.

FUTURE DEPENDS ON LABOR COSTS

By E. W. Izard

Yarrows, Limited, Victoria, B.C.

In the early part of 1919 the supply of labor was less than the demand, but now the supply is becoming greater and the consequence is, the efficiency is becoming higher. The increase in the supply of labor has been chiefly brought about by the return of mechanics and others from overseas, and the demand for labor becoming less on account of the decrease in shipbuilding on this coast. The supply of raw materials is improving owing to the removal of war restrictions and better shipping facilities.

The cost of production during the last year has increased slightly, chiefly on account of the increase in wages per the Robertson award, and also on account of the increased cost of lumber and other materials.

Contracts for ships have been less in number and are more difficult to obtain on account of the present keen competition which prevails.

The future of the Canadian shipbuilding industry depends chiefly on the cost of labor, which is at present too high for competition with Europe. On the west coast of Canada the cost of labor is higher than in the east, and the working hours shorter, and that, together with the cost hauling the material from the east or U.S.A., puts the west at a decided disadvantage when competing with Eastern Canada.

During the early part of the year we completed one steel stern-wheel steamer, 165 ft. x 35 ft. x 7 ft., and shipped same to India for re-erection, and we have just lately completed a steel ferry 90 ft. x 27 ft. x 5 ft. for service on the River Fraser.

COSTS COMPARE QUITE FAVORABLY

By L. Dahlgren

General Manager, Dominion Shipbuilding Co., Ltd., Toronto

The outlook for shipbuilding in Canada is fairly bright for the next two or three years, providing labor and material will get into a settled condition, labor especially. In comparing costs between the United States and Canada, I find that we compare very favorably; also in comparison between Great Britain and Canada, that we are nearly at a par as to costs. In view of the fact that British shipbuilders are filled up with contracts for some time to come, I think the foreign buyer will look to Canada before going to the United States. However, I do not anticipate many foreign orders being placed until the present rate of exchange gets better, which will probably not be for some little time.

I think in order to encourage shipbuilding in Canada, that the Government should give a bounty of say from $5 to $15 per ton deadweight, and this to continue until we get our labor as efficient as in Great Britain, which will probably take three or four years. Also the carrying out of the proposed deep waterways would be a great boon, especially for the lake shipbuilders. Everything considered, I look for the time to come when Canada, through her natural resources, etc., will be in a better position to build ships than any other country.

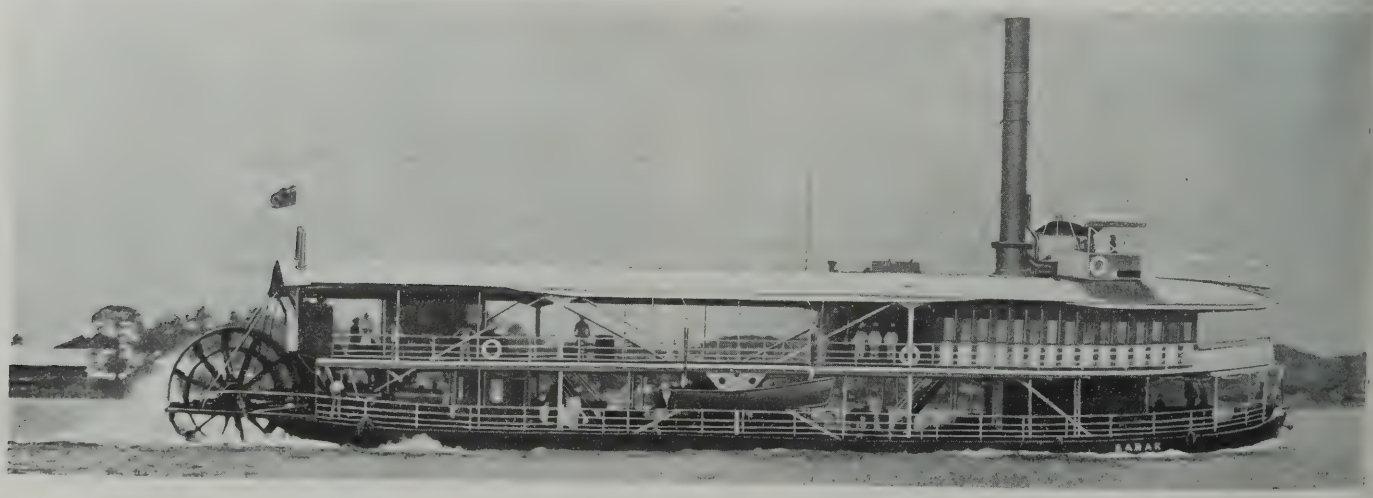
FUTURE NOT BRIGHT AT MOMENT

By John S. Leith

General Manager, Collingwood Shipbuilding Co., Limited

We have no trouble at the present time regarding the supply of labor as we are not working nearly up to capacity. Regarding efficiency it will take years of steady employment to bring this up to the standard obtained in shipyards in Great Britain which are our worst competitors at the present time. At the moment we are not having any trouble regard-

(*Continued on page* 280)



River Steamer for India: Built at Victoria, B.C., by Yarrows, Limited

Conditions Among Stove Manufacturers

IN the stove manufacturing industry, the first half of 1919 was rather quiet, with demand slack. In the latter half of the year, demand developed rapidly and manufactures were fully occupied in meeting it. Some difficulty was experienced in getting help and there was also trouble over raw materials with the result that output was not increased to any great extent. As with other lines of goods, so with stoves the demand has been for the more expensive makes. Export trade has not been a factor though there have been enquiries which may lead to the establishment of connections with foreign markets.

SPRING BUSINESS TO BE BETTER THAN USUAL

By E. H. Gurney

The Gurney Foundry Co., Limited, Toronto

All types of labor have been scarce, in view of demand. There have been ample supplies of raw materials until this fall. The stove industry has, of course, felt both the steel and the coal strike. I would think that the general scale of operations has been lower than demand called for, due to the labor situation. In my opinion, production this year has been slightly better than the production of the previous year, but not adequate to meet the demand.

I do not consider that there has been any important change in tendency this last year with respect to kind and quality of goods in demand. The trend of prices, due to rising costs, has been up. As far as marketing conditions are concerned, the stove manufacturers, like all other manufacturers, are not anxious to make commitments far in advance; consequently conditions under which orders may be booked have been under some limitation.

Export business is not an important factor at all with any of the Canadian stove manufacturers. The principal reason is because the type of stove made in the United States and Canada is different entirely from that sold in most foreign countries. Due to the fact that export orders have not been in sufficient quantity to justify the expense, and due to the fact that the home market has pretty much taken the capacity of the manufacturers, it has not been feasible to accept such business as has offered.

In the stove business the important demand comes in the fall. I would think that spring business will be better than usual, and I can have no opinion with respect to conditions as far ahead as next fall.

STOVE PRICES ARE CONSERVATIVE

By W. S. Fisher

The Enterprise Foundry Company, Sackville, N.B.

Manufacturing conditions as regards labor have been unsatisfactory, especially during the past two or three years. As to raw materials, they have been pretty scarce and prices anywhere from one to four hundred per cent. above the former. The result is that our general operations have been greatly hampered, and, while the selling prices have advanced a good deal, they have not increased in proportion to the increased cost brought about as above.

Production for the year in tonnage is very little more than a year ago. The first six months' trade languished, as everyone expected lower prices. After that it came with a rush, and during the latter period we were at times unable to fill our orders. For a time during the war the tendency seemed to be towards the purchase of cheaper goods, but during the past season the demand for the very best goods has been much more marked and at present the demand continues along this line.

Export business in stoves has never been a factor of consequence in Canada, as up to the time of the war it was impossible for us to compete with the manufacturers in the United Kingdom and U.S.A. For the past year or two inquiries have been coming to Canada from other parts of the empire, and some business (though yet small), has developed. What the final result will be we are unable to judge at present, and will not until conditions become normal once more. Meantime, as in all other lines of manufacture, we feel that every effort should be made to capture any foreign business that it is possible to secure, as by and by, when the next depression comes, we will need it.

As to the general outlook, we are under the impression that the manufacturing facilities in Canada in the stove line are fully adequate to meet the normal demand. Later, if immigration flows into this country freely, there may then be opportunity for the enlargement of the present facilities.

In our opinion, the stove manufacturers have been ultra conservative in advancing prices, having delayed making advances that should have been put into effect long before they were, and to-day the new total advance made by the stove manufacturers in Canada is not in proportion to the increased cost, and it is a curious thing that there are many instances of stoves made from American patterns being sold for less money in Canada than goods from identically the same patterns made in the United States, where prices in these lines have been advanced to a much greater extent.

PUBLIC WANT LOT OF NICKEL TRIMMING

By Ontario Manufacturer

We found that at the beginning of the year there seemed to be a plentiful supply of labor and there was no difficulty in getting any material that we wanted. The general public, however, was very backward about buying, feeling sure that a reduction in prices was not far off. This condition continued until the early summer, by which time higher labor costs and advancing costs in raw materials made higher instead of lower prices necessary. The public became convinced that higher prices would prevail and began to buy freely, with the result that our output increased over what it had been a year ago, but so far as we are concerned does not reach in units the number we made in pre-war years. Higher costs have more or less forced the sale of medium-priced lines, but even on these the general public wants a lot of nickel trimming and will not be satisfied with the planer type of ranges which are just as efficient and could be sold for much lower prices.

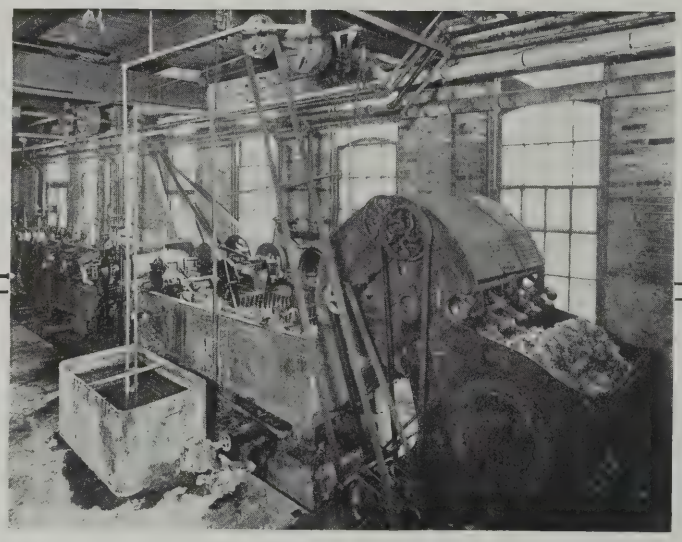
Another development has been the increased use of porcelain enamel on ranges, both cast-iron and steel, and there seems to be a distinct tendency towards use of more enamel on ranges during the next year.

We are looking forward to good stove business during 1920. We are confident that manufacturing facilities in

(*Continued on page* 244)

The Textile and Associated Industries

EMBRACED under the general head of textile industries are so many different undertakings that it is difficult to summarize conditions in them all within the limits of a single paragraph. A review of the reports published on this and the following pages would indicate that activity has been general; that labor scarcity and a lack of raw materials have been in evidence, and that capacity has been considerably extended. The market has been strong, with popular demand tending towards goods of quality and high price. Export trade has been done to a certain extent, though domestic demand, particularly in the last half of the year, has become so pressing that manufacturers in many instances have given up export opportunities. Through most of the reports there runs a note of optimism, and the opinion is generally expressed that the textile industry in Canada is now firmly established. The various divisions of the industry will be found classified under such heads as knit goods, carpets, clothing, shirts and collars, etc.



Machine for Cleaning and Scouring Raw Wool

Photo by courtesy Toronto Carpet Manufacturing Co.

GENERAL REVIEW OF COTTON INDUSTRY

By F. G. Daniel

General Manager, Dominion Textile Company, Limited

The year now closing has been for the cotton industry in Canada one of great activity and varied difficulties. Owing to the constantly rising costs of materials and commodities of every description, living costs, until recently, tended to increase monthly, causing a very large amount of labor unrest, accompanied by demands for increase in wages, reduction of working hours, and numerous other requests, both reasonable and otherwise. It seemed impossible for a manufacturer, notwithstanding his desire to have his wage-roll keep pace with his employees' needs, to be entirely free from labor troubles, which was the cause throughout the year, largely, for reduced efficiency and production. I feel, however, that, in this respect, we are gradually reaching a more sane basis, as is evidenced by the tendency of the operatives to settle down more steadily to work.

During the four and a half years of war, consumption of raw cotton and cotton goods for army purposes was enormous, and civilian requirements received secondary consideration, with the result that there is a world-wide shortage of cotton goods. Raw cotton, especially, has been very seriously affected, partially for the reason mentioned, and largely by five crop failures in succession. From an average pre-war price of, approximately, 12c. lb., cotton has risen to, approximately, 48c. lb., delivered at the mills, exclusive of war tax and exchange. Put in another form, the cost of the cleaned cotton in a pound of finished cotton goods which, in 1914, was 14c., is to-day 65c.

Until recently, the output in the cotton mills in Canada was slightly lower than a year ago, but I am hopefully looking forward to an improvement in the output during the next few months.

Owing to the inability of manufacturers to secure machinery, there has been very little increase in cotton mill capacity in Canada during the past year—I think probably 3 per cent. would be the maximum. This country had in operation in 1914, approximately one million spindles, with accompanying looms, etc., employing 22,000 operatives, with an output valued at, approximately, $27,000,000. This year there were in operation about 1,138,000 spindles, giving direct employment to 24,000 operatives, and a production valued at about $70,000,000. A fair estimate of machinery on order for the various companies in Canada would represent an increase of, approximately, 20 per cent. in spindleage and looms, and practically all this machinery should be producing before the end of 1920.

The experience of the past few years has given the cotton manufacturers of Canada an opportunity to demonstrate *the value of the industry to the country*, and that their cloths and yarns have not been surpassed, either in quality or finish, by those of any other country. Owing to the fact that this country is to-day, I believe, the lowest-priced drygoods market in the world, the demand for cotton goods of every description for home consumption has been without parallel. The export business is practically *nil*, as the needs of the home market are greater than the productive capacity.

I have every confidence that the trade situation in Canada for the next few years will be, at least, as good as that of any other country in the world, provided the wave of extravagance, now one of the world's most serious problems, can be checked, and a strong curb placed on the importation of non-essential articles. There is great need for the manufacture, within the country, of many lines of materials, supplies, etc., at present imported, as we cannot much longer continue the extension of credits to Europe whilst paying a heavy toll in the form of depreciated exchange upon such commodities as we have to import from the United States.

SCARCITY OF COTTON AFFECTS INDUSTRY

By R. G. Tolmie

Canadian Cottons Limited, Montreal

Our mills have suffered more or less during the past year from a shortage of labor, although conditions in this respect have shown a little improvement during the past month or so, as is usual with the approach of winter. As regards raw

aterials, our interests naturally are chiefly in raw cotton. nfortunately there is a great scarcity of this material this eason owing to the short crop, and also the increased de- ands from Great Britain and Europe since the war is over. he price has, in consequence, advanced steadily.

Our production at the present time is very slightly in xcess of what it was a year ago. The constant advance in rices during the past two or three years has brought about somewhat greater demand for the lower lines of goods hich we make, but generally speaking, there has not been very material change in the range of cloths which we have een making for some years.

We do not interest ourselves in normal times in export usiness. The only exporting which we are doing at the resent time is in some grey cottons for Roumania. The emands of the home trade are such that we are not looking or further developments in the export line.

Owing to the general world shortage in all cotton goods, s in commodities of nearly every description, there is very kelihood in our opinion that the demand will be in excess f the supply for the next few years.

NEVER SO FAVORABLE A TIME

By W. Tinker

Secretary, Canadian Woollens Limited, Peterborough

Our experience as regards labor supply during the past ear has been very satisfactory. We have increased wages o same extent, and have had no labor troubles of any kind. Ve believe the same may be said of the whole woollen in- ustry in Canada. Raw materials have been at times very ifficult to obtain. Quite a large proportion of this comes rom Great Britain, and the coal strikes in Yorkshire, dock trike at Liverpool, and the railway strike in Great Britain, ad a great effect on supplies of raw material, but shipments ave been coming forward with regularity from U.S.A., South merica and Australia, which have enabled us to keep up our roduction. The prices of raw material have been very high. n fact, at this time almost any price may be obtained for ool tops for immediate delivery. General operations on the hole have been satisfactory. We have had many troubles, f course, but all have been overcome.

Production has increased to a slight extent owing to the fficiency on the part of the executive, who have given very areful attention to this matter. The present output is about 0 per cent. higher than last year.

Goods in demand have shown a marked tendency towards better quality, at of course, higher prices. The latter were ever so high as they are at present, and the prospects for spring and fall for 1920 all tend towards still higher prices for all manufactured articles. Marketing conditions have been greatly in favor of the seller. In fact, no effort is needed to dispose of anything in the woollen trade, the fundamental feature being delivery.

The export trade is again showing up a little, but prices for this are not as large as the home market, with the result that many mills are not taking any export business at present. Our own opinion is that for the next few years it will not develop to a great extent, owing to the fact that the home market is starving for goods and must be supplied.

The outlook for the future, in our opinion, is extremely bright. We do not think there ever was such a favorable time for manufacturers in the history of the Dominion. Wages and other manufacturing costs in Great Britain are extremely high and this, we believe, will have the effect of keeping the British manufacturers out of this market to a very great extent. The demand for woollen goods in Canada is likely to keep up, and the manufacturing facilities at present are not sufficient to keep pace with the demand. We, ourselves, are planning, in fact we have the machinery in course of erection, which will increase our output 50 per cent.

O. Butler, *Vice-President and General Manager, Canadian Connecticut Cotton Mills Co., Sherbrooke.*—"We find that production per machine per hour per operative has decreased. Our entire product goes to tire makers in Canada. We believe that the demand is likely to increase for our particular fabric, and we have plans for the enlargement of our factory. This will take place in 1920, when our plant in Sherbrooke will be doubled in size."

OUTLOOK FOR SOME MONTHS IS GOOD

By C. T. Grantham

General Manager, Empire Cotton Mills, Limited, Welland

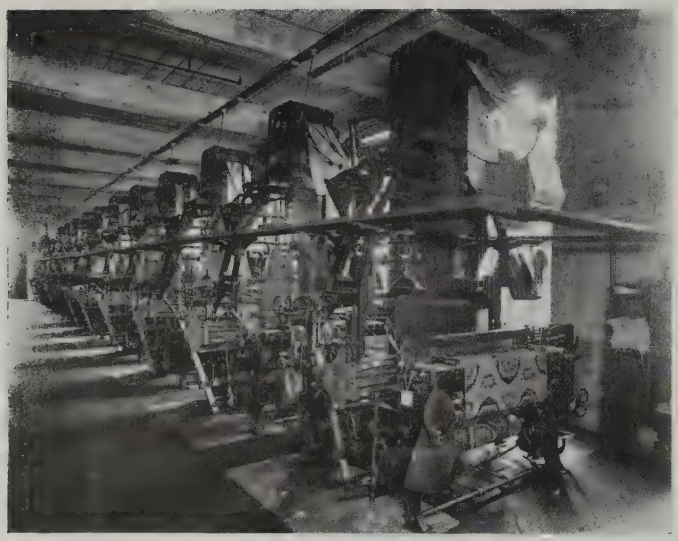
We have had no serious difficulty during the year with labor. We have been able to secure an ample supply of raw material, and our general operations have been successful. It is impossible to increase our production, as we are now running ten hours per day, and over 40 per cent. of the capacity running nights. This is about the same condition as existed a year ago.

There have been no important changes as regards the kind and quality of goods in demand or in marketing conditions, but prices are higher than they have ever been since the Civil War. We know nothing about the exporting business, as we have not yet had any goods to spare for this purpose, except one case where we sold a large quantity

View of the Mule Spinning Department in a Canadian Textile Factory.

Photo by courtesy Monarch Knitting Co., Limited, Dunnville.





Series of Ingrain Carpet Looms



Shearing Machines for Wilton Carpets

Photos by courtesy Toronto Carpet Manufacturing Co.

through the Canadian Trade Commission to the Roumanian Government.

The outlook for at least some months ahead is very good, and we believe the demand will keep up until midsummer at least. We are of the opinion that manufacturing facilities will not be adequate to keep pace with the demand during that period. Plans for factory enlargement have been considered, but nothing definite decided upon.

A Quebec Manufacturer.—"Our experience of manufacturing conditions as regards labor, raw material and general operations has been the most difficult we have ever experienced, and at the present moment shows no signs of improvement. Raw cotton conditions have never been so bad. Our production this year and last is the same, with the exception of loss last year due to influenza. The demand for our goods has continued excellently. We are not posted in lines other than those manufactured by us. We have never exported, with exception of a small lot of goods to Roumania. We believe the demand will continue."

UNABLE TO INCREASE PRODUCTION

By Ontario Manufacturer

During the year just closed our output has been somewhat restricted, owing to scarcity of skilled labor, but we are gradually getting back to normal. The hours of labor were reduced from 55 hours per week to fifty hours. This had an immediate effect upon production, which dropped almost in proportion, ten per cent. This to some extent may be overcome by additional machinery, but at the present time we have the decreased output. We have not been able to increase our production and have been running at the utmost capacity for several years.

We have continued to make our regular lines and have found a steady demand for all we could produce. Having had a steady demand for all goods we could manufacture, in the home market, we have not offered any goods for sale for export. A number of mills, however, are doing an export business.

The business outlook for the year 1920 is very good. There is every prospect of there being a ready market for the products of Canadian woollen mills. Fine wools (merinos) have reached an extraordinary figure and have steadily risen for the last six months. A recent circular received from London, England, describes them as having gone to dizzy heights. It is generally recognized that there must be a drop in prices for these fine qualities, but the difficulty is to know when it will occur. During the past week competition has been very keen for them at top figures.

CONDITIONS IN THE LINEN INDUSTRY

By Wm. Berry

General Superintendent, Dominion Linens, Limited, Guelph

We have been unable to secure enough skilled help to keep our plant running up to full capacity. However, we have no complaint to make as to supply of raw material or transportation. General conditions in our works have been satisfactory, and in spite of handicap previously mentioned, we have been able to increase our output during the past year.

Referring to market conditions, the demand for our goods has been far in excess of our possible output. On account of the steadily advancing markets for raw material, prices of manufactured products have been advanced very materially during the past year.

From present appearances, the demand will be maintained, and until there is a decided drop in raw materials, markets and a general unsettlement in trade conditions, we think the present demand for our goods will be maintained.

It is not our intention to make any further enlargement. Additional equipment will be bought to round out the production of the different plants as this demand may develop.

CONSTANT DEMAND FOR CANADIAN WOOLLENS

By R. Thomson, Jr.

Hawthorn Mills, Limited, Carleton Place

Our experience of manufacturing conditions as regards labor has been fairly good. Our raw materials have been extremely high priced, but reasonably freely obtainable. Our labor conditions are probably more favorable in a small town than they would be in larger centres. In the smaller towns the labor is more settled.

Our production was much reduced in the early months of the year owing to the armistice and the extremely unsettled state of mind of the purchasers of goods. However, as woollen manufacturers, we were able early in the year to obtain fairly large-sized orders for woollen goods of varying classes from Roumania and Belgium, and the credits for these being guaranteed by the Canadian Government, re-

lieved the situation very much indeed, and kept our employees in employment, whereas otherwise they would have been added to the large number of unemployed and unrestful people in the country. Later in the year people regained confidence and purchased more freely, with the result that the product for 1919 over all in the woollen manufacturing in Canada must have very greatly increased. Our own business here has overcome the lessened production of the early months of the year, and will show a fair increase over all for the year.

The tendency as regards the kind and quality of goods in demand is decidedly towards better goods and higher prices. So much is this so, not only in Canada, but generally speaking the world over, that fine wools have reached the pinnacle of high prices, while the coarse, low-grade wools are comparatively cheap at the present. To illustrate, there are wools on the market to-day on a clean basis that can be bought as low as 70c. per pound, while fine merino wools on a scoured basis are worth $2.90 to $3 per pound. Marketing conditions are good, from the manufacturers' point of view, owing to the great demand—the demand far exceeding the supply.

There never was any export business in woollen manufacturing worth while being considered good business, from Canada, until the war. Since the armistice was signed, and for the reconstruction of foreign countries, Canada has sold to date ten million dollars' worth of woollens for export, and during this year from 50 to 65 per cent. of these goods have been made and delivered.

We size up the outlook for the future to be a constant demand for Canadian goods for some considerable period, inasmuch as the Canadian mills have increased their facilities and bettered their conditions generally during the war time and also during the year 1919. Moreover, the Canadian buyer has been forced, owing to the shortage of woollens from Britain, to buy largely at home, and to supplement that buying by purchases in the United States. Canadian woollens have at last come into their own, and the writer believes that for those mills who make really first-class goods both in woven fabrics as well as underwear and hosiery, that they may look forward with great confidence to be, for years to come, constantly well engaged. Having stated previously that the demand is greater than the supply, naturally leads to the increasing of facilities, and as far as the procurement of textile machinery will allow, mills have increased both in buildings and equipment and are continuing to do so, to a very great extent. Our own plans are for further increase, as far as may safely be done within the compass of our environment. We have added very considerable machinery and are making much higher classed goods now than at any previous time.

Knit Goods

STRONG LEANING TOWARDS QUALITY GOODS

By K. C. Turnbull
Managing Director, R. M. Ballantyne Limited, Stratford

While there has been a considerable shortage of labor, and while we could have employed a good many more hands than we have employed during the past year, the situation in this regard has not been nearly as serious as the raw material situation. We have had very great difficulty in getting anything like an adequate supply of yarns for our purposes, and we have had to sacrifice a good deal of business because of the lack of raw material. The fact that we could not get all the raw material we required minimized to some extent the fact that we could not add to our plant in the way of machinery, it being a very difficult matter to get delivery of knitting machines of the class we operate. In no other respect have we had very great difficulties.

Production has increased, being a very considerable amount in excess of the output of a year ago. We refer of course to the actual units produced rather than to increase in the dollars of output, which naturally should show an increase owing to advanced prices.

The tendency as regards the kind and quality of goods in demand is showing a very strong leaning towards the higher-priced goods. The demand for lower-priced articles does not seem to exist. Our trade has run almost entirely on the better class of goods at higher prices. Export business has been offered us, but we have not been in a position to undertake anything for export and can say nothing as to how this trade is developing.

From the business we have already booked for next year, it looks as though the demand will be greater than it has been during the past year, and we would say that the manufacturing facilities will have great difficulty in coping with this demand. We refer, of course, only to the lines of goods we manufacture in our own factory. We have already enlarged our plant, have added 100 per cent. to the manufacturing floor space, and we expect to be fully employed for the next twelve months at least.

DEMAND GOOD FOR ANOTHER YEAR

By J. R. Moodie
J. R. Moodie & Son, Limited, Hamilton

Manufacturing conditions at the present time are unsettled. The labor situation is improved to a small extent since the war ended but there is difficulty in getting raw material, and this of course means that our production is limited. Notwithstanding, production at the present time compares favorably with that of a year ago.

As to market conditions, we find a tendency toward the buying of a better class of ladies' and children's underwear. The demand for a cheaper line is dropping off to quite a great extent. Export business is being done on a very limited basis.

We have no plans in the way of factory extension. We believe that owing to the shortage of knitted underwear, that the demand for the same will continue to exist for one year if not two years, from the present time.

SUPPLIES ARE DIFFICULT TO OBTAIN

By J. A. Burns
General Manager, Monarch Knitting Co., Ltd., Dunnville

Our experience during the year in regard to labor and raw materials has been that female labor is particularly scarce, and it is impossible to get sufficient female employees to manufacture sufficient goods to supply the requirements of the trade. The situation on raw materials is very serious. Prices have greatly advanced, and supplies are difficult to obtain. This applies particularly to mercerized cotton yarns, and wool tops. Qualities of 50's and finer can only be shipped from England on obtaining license from the British Government, and licenses are only granted for a small percentage of quantity applied for. In some instances only 20 per cent. of quantity applied for is being allowed.

Production has not increased. In fact it has decreased as compared with a year ago. This is caused not only by scarcity of labor, but inefficiency of help. Employees are earning big wages, but a large percentage do not put in full time. We find the heaviest demand on the better lines of goods. There is a brisker demand, particularly for higher-priced lines. Export business during the present year amounted to about one-fifth of our output. We do not antici-

pate, however, being able to take on as large an export business for 1920, unless orders are received at an early date.

It appears to us that the capacity of all mills will be taxed to fill the requirements for domestic and export business. If female labor could be brought to Canada from England, Ireland or Scotland, we believe there is sufficient machinery to take care of all business that could be secured. We are increasing the output of our St. Catharines hosiery factory by 50 per cent.

LABOR SCARCITY HAS BEEN DRAWBACK

By C. Turnbull

The C. Turnbull Co. of Galt, Limited, Galt

Our experience in regard to labor is that labor is difficult to get. We are very short on female help, and cannot get production proportionate to lesser number of hours we have been working since the beginning of the year. We have had no difficulty in getting raw material. Our production has not been increased and output will be from 10 to 15 per cent. less than a year ago.

The better quality of goods have been more in demand than the cheaper, and we have had no trouble in getting fair prices. Marketing conditions have been fairly good. Export business has not become a factor to any extent and is developing very slowly.

We think that the demand will keep up at least for another year. We have manufacturing facilities to meet larger demand, if we can overcome difficulty in procuring help. We have no plans for factory enlargement, as there is no inducement to enlarge with labor scarcity such as we experience and have experienced all year.

MANY ENQUIRIES FROM FOREIGN COUNTRIES

By A. F. Zimmerman

Vice-President, Zimmerman-Reliance, Limited, Hamilton

We find that production has been seriously curtailed owing to the shortage of labor; the class of labor we are employing to-day not being as efficient or industrious as heretofore. Up to the present we have been able to secure enough raw material to keep our plants running, but we are now facing a shortage owing to complicated conditions.

All classes of knit goods are in demand at the present time. Ruling prices are naturally considerably higher and likely to go higher unless something occurs to halt the commodity markets all over the world. We are receiving a great number of enquiries from our agents in foreign countries, and this business could be very largely extended were we in a position to produce the goods in addition to taking care of our domestic market. Unfortunately we cannot do this, and have to consequently turn down the foreign trade.

We cannot help but feel that the demand is likely to continue for some considerable time owing to the world shortage of goods. When this shortage has been made up, we believe there will be a serious depression in the textile industry. We have no plans at the present time for factory enlargement, although we might say that we built a third floor over the whole of our plant last summer, which will take care of our needs for some time to come.

DEMAND TO CONTINUE THROUGH 1920

By H. G. Smith

Secretary-Treasurer, Mercury Mills Limited, Hamilton

In the matter of skilled labor supply, manufacturing conditions are somewhat better than during the war period, but the improvement is very slight. As regards raw materials, if anything these conditions are worse than during the war. Machinery is higher priced than ever before, and in some lines deliveries are from one to two years away. We do not believe production has increased to any extent, at least not worth mentioning. Possibly the output is about the same as a year ago.

As regards underwear, the tendencies as to kind and quality now in demand are hardly as pronounced as in the case of hosiery, but generally speaking, the better goods are wanted. Prices are fully as high as at any time in the past few years, and unquestionably will be higher. Cotton is to-day at a terrific price, and fine wools especially have been going upward at an alarming rate. The demand for finished goods is brisk.

There is a substantial export demand, and if Canadian manufacturers could get enough labor a very big business could be done. In our opinion some of the export business could be made more or less permanent if manufacturers will give careful attention to the requirements of their foreign customers.

So far as we can see, the demand will continue throughout 1920, and we do not believe in a general sense that production in underwear will be greatly increased. So far as we ourselves are concerned, we have just about completed a substantial enlargement to our factory, and we expect to be moving machinery into this new extension by the end of the present week.

DEMAND HAS BEEN FOR BEST GOODS

By I. Bonner

General Manager, Penmans Limited, Paris

During the year 1919, the knit goods trade has passed through most unusual conditions; labor has been scarce—particularly female—and also those skilled in the trade. Raw materials have seen some tremendous advances as, for intance, mercerized yards, advancing from $1.10 per pound for a 2/40's count to $2.80; cashmere yarns from $2.90 per pound for 2/40's count to $4., and so on through the whole list of materials such as raw cotton, wool top, noils, etc.

The great question has been to have selling prices keep pace with these advances, and know when one is covered. Furthermore, it has necessitated carrying large stocks, as one could never know whether contracts, as regards delivery, would be carried out by his suppliers, and in many cases where such supplies arrived late, they were, if from the U.S., subject to heavy exchange rates.

Production of knitted goods throughout the country has undoubtedly increased through new enterprises starting and established firms extending, but production per operative is, we believe, smaller than in pre-war days. Compared with a year ago, production, I think, would be about the same per operative.

The outlook for the trade is very difficult to foresee, as many factors enter into the result. It looks, however, as though local and foreign trade will be good just so long as foreign countries are unable to come back to normal production and costs, and, in equal proportion, to their ability to produce and sell abroad, will our business hold good. Many think, however, that the changed conditions as regards wages abroad will be a factor in favor of Canada.

CLOTHING VALUES TREMENDOUSLY INFLATED

By George C. Coppley

Copley, Noyes & Randall, Limited, Hamilton

I would not care to essay a forecast of the clothing business at the present time. Values are so tremendously inflated in Great Britain, the United States and our own market that it seems that a reduction in prices is necessary to put the industry upon a sound and stable basis. In my opinion the governing condition is the law of demand and supply. Consumers are able and willing to pay the higher prices, and while this condition prevails, manufacturers yield reluctantly to the exorbitant demands of labor to keep their machinery going, booked months ahead. A reduced demand seems to me the only road to a deflation in values.

Canada's Industrial Expansion

A Record of Progress

Have Erected Warehouse

McArthur, Irwin, Limited, Montreal, have recently Completed the Erection of a Large Warehouse

Owing to the heavy demand for their products which consist of paints, colors, varnishes, dyestuffs, chemicals, etc., and to the fact that they are compelled to operate their plant at full capacity all the time, McArthur, Irwin, Limited, Montreal, have found it necessary to add an extensive warehouse to their factory at Outremont. The company report that their white lead scored an immediate success after it was placed upon the market and they anticipate that it will not be long before they will be compelled to enlarge the capacity of their plant.

Rails for Roumania

Dominion Steel Corporation Have Received Large Order for Rails from the Roumanian Government

An interesting export order recently received in Canada, is one that has been obtained by the Dominion Steel Corporation from the Government of Roumania. It is for 7,500 tons of rails of a "T" pattern of special section, weighing approximately 67 pounds to the yard. The rail differs very little from the usual A.S.C.E., or other American standard patterns. It is expected that the rolling of these rails will be started in January. As soon as the rolls are ready the rail mill will be started on single shift, and this means that from three to four weeks' work is now in sight for this department.

Branch Factory at Vancouver

Canadian Carbonate Co., Limited, are Adding to Their String of Plants Across Canada

The Canadian Carbonate Co., Limited, who recently started the erection of a branch plant in Hamilton, Ontario, are now about to erect a plant in Vancouver. They have secured property 100 x 120 feet at the corner of 11th Avenue and Yew Street, and will spend about $100,000 in the erection of this plant. The establishment of this branch in British Columbia has been rendered necessary through the increasing demand for the company's product in British Columbia, and also on account of export opportunities. The plant will probably be ready for operation by July 1st. For the present, Alberta business will be taken care of by this branch.

Enlarging Their Factory

Firth Brothers, Limited, Hamilton, will Add Two Storeys to Their Present Factory Building

Announcement is made by Firth Brothers, Limited, Hamilton, manufacturers of clothing, that owing to the immediate need for more space they have decided to put an additional two storeys on to their present factory building. The building was originally built so that these two storeys could be added at any time.

The company have also purchased property immediately in the rear of their present premises with a frontage on Hughson Street of about 150 feet. On this property they propose eventually to erect a modern clothing factory possibly four storeys in height. However, they have not yet decided definitely when they will proceed with this latter development.

Building New Foundry

Dominion Steel Products Company, Limited, of Brantford, Installing 16-Ton Air Furnace

Construction work has been started by the Dominion Steel Products Co., Limited, of Brantford, on the erection of a new foundry building, 100 x 160 feet. This foundry will be equipped with two cupolas; also with a 16-ton capacity air furnace. The latter is being installed for the casting of heavy steel mill rolls, also rolls for rubber-working machinery. It is expected by the management that this foundry, which will have a capacity of about 15,000 tons of castings per annum, will be in operation in about eight weeks.

The company have also purchased, and will shortly install an electric furnace for the smelting of all types of non-ferrous alloys, with a capacity of about 300 tons of castings per annum.

Erected Five New Buildings

Jackson Machines, Limited, Saskatoon, have recently Completed Large Factory Extension

During the past season the plant of Jackson Machines, Limited, manufacturers of sheaf loaders and carriers and threshers, Saskatoon, was enlarged by the addition of five new buildings. These comprised a machine shop, 32 x 108 feet; a wood shop, 56 x 64 feet; a stock room, 56 x 56 feet; and two erecting rooms, 40 x 80 and 72 x 90 feet, respectively. The company are engaged in the manufacture of the Jackson Combination Sheaf Loader and Carrier, and the Jackson Low-down Thresher, two machines which are meeting with much favor among the farmers in Western Canada. In addition to handling their own product, they are also distributors for the Eagle Tractor and the Happy Farmer Tractor, machines manufactured in the United States. Last season the company shipped 75 carloads of its own product and this year they have every prospect for a very largely increased business.

Company Contemplates Addition

Walter Blue & Co., Limited, of Sherbrooke, may Erect Four-Storey Addition to Present Plant

The report that Walter Blue & Co., Limited, manufacturers of clothing, Sherbrooke, Que., were about to extend their plant, is characterized by the management as just a little premature. As yet the directors have not arrived at any definite decision. The matter has, however, been up for discussion and there is the possibility of their putting up a four-storey addition, 60 x 120 feet, to their present plant.

About six months ago, Walter Blue & Co., Limited, purchased the Coaticook Woollen Mills at Coaticook, Quebec, and have during the last six months enlarged and improved them. At the present time, they are manufacturing at these mills a



Shoe Machinery Plant Being Enlarged

View Showing Progress of Construction on Addition, 60x120 feet, which is under Construction by the United Shoe Machinery Co., of Canada, Limited, Montreal

high-grade of pure wool homespun which is being used in their clothing factory, the entire output being utilized. They claim that they are the only clothing manufacturers in Canada operating a woollen mill in conjunction with their clothing business.

Making Important Addition

United Shoe Machinery Co., of Canada, Limited, are Adding to Their Present Buildings at Montreal

The United Shoe Machinery Co., of Canada, Limited, Montreal, are at present erecting a large addition to their present plant. The building is 120 x 60 feet in size, four storeys high, of steel frame and brick construction. It will be heated with forced hot water system, and will be used for the manufacture of shoe machinery. They expect to be ready to occupy the building about the 1st of April.

Welland Plant Acquired

Mead-Morrison Manufacturing Co., of East Boston, Buy Out M. Beatty & Son, Limited

The M. Beatty & Sons, Limited, Welland, manufacturers of dredges, hoisting engines and other contractors' machinery, have been bought out by the Mead-Morrison Manufacturing Co. of East Boston, Mass. It is hardly likely that the plant will be operated by the Boston company direct. A separate Canadian company will be formed for the purpose, details of which will be announced later.

An Expanding Industry

Magnet Metal and Foundry Co., Limited, Winnipeg, Adopt Sound Development Policy

An increase in their capital of $50,000 will enable the Magnet Metal & Foundry Co., Limited, who were organized in Winnipeg in 1918, to make improvements to their plant and extend the field of their operations. The company own a 2½ acre site in Elmwood, with a 600 foot spur track. Their plant consists of foundry, blacksmith shop, machine and assembly and pattern shop in solid brick, and office and storage buildings in metal clad, laid out to produce economically their lines of farmers' hardware and light implements. They have secured exclusive Canadian rights on several implements and tools, which ensures them against foreign competition. They also make a complete line of farmers' hardware, and by adopting a policy of selecting those lines which have their principal material component cast iron, they can translate the waste material of the western farm into finished goods with a shorter round haul than their eastern or southern competitors. They manufacture a limited number of lines and sell to the wholesale trade only.

The president of the company is Hugh R. Eade, and associated with him on the directorate are A. E. Donovan, manager Creshman Motor Works of Canada, Limited; W. R. Ingram, Swift Canadian Co., Limited; E. G. Powell, Kelly-Powell, Limited; Albert Hoiland, president Hoiland Mfg. Co., Fargo, N.D.; Hamilton Echlin, Echlin Mfg. Co., etc.

New Industry for Waterloo

Forsyth Productions, Limited, Start Manufacture of Men's Wearing Apparel

Operations recently commenced in the new plant erected at Waterloo, Ont., by Forsyth Productions, Limited, a new company, with an authorized capital of $200,000, formed in Kitchener for the purpose of manufacturing varieties of men's wearing apparel. The company purchased a lot, 135 x 135 feet, located on the city square in Waterloo, and erected a building 125 x 30 feet, two storeys high. About fifty hands are employed. The company are an off-shoot of John Forsyth, Limited, Kitchener.

Establishing Canadian Plant

Bovril, Limited, the British Food Specialists, will Manufacture in Canada

One of the most interesting announcements of the present month, is that Bovril, Limited, the famous British food specialists, will erect a manufacturing plant in Montreal. They have secured from the city a plot of land containing 25,000 square feet and located in a remarkably fine high position at the north end of the city. Plans are completed for the erection on this property of a unit on the lines of the company's factory in England. The area of the ground will admit of the erection of other units as extra accommodation may be required.

The building will be fireproof and of excellent appearance, while every possible arrangement will be made to ensure its hygienic character. It will consist of five floors, each containing 5,000 square feet of space and will be built of steel and concrete, faced with Don Valley buff bricks and Indiana limestone. The walls and columns will be faced t

height of five feet with white enamelled bricks above which the walls will be painted with white enamel. It is estimated that, excluding the manufacturing plant itself, the factory will cost $275,000. It will be completed either late in May or early in June of the present year.

Adding Another Storey

The National Acme Co., Montreal, Are Extending Their Plant and Increasing Output

An increase of approximately 50 per cent. in output will be secured by the National Acme Co., Montreal, manufacturers of milled screws, nuts, bolts and special parts, through the addition of another storey to their main building. This will give approximately 23,650 square feet of additional space. The enlargement has been necessitated by the increased volume of business being booked, particularly from automobile manufacturers. The work will be completed early in the year, and from 75 to 100 additional hands will be employed.

Plant Nearly Ready

Factory at Windsor of Champion Spark Plug Co. of Canada, Limited, Will Soon be Producing

The new plant of the Champion Spark Plug Co. of Canada, Ltd., located at Windsor, Ontario, is rapidly nearing completion, according to advices received from Arthur J. Hayes, Canadian sales manager of the Spark Plug concern. He states that by the first of the year the factory will be in production and that henceforth all Champion spark plugs used in Canada and the British possessions will be manufactured at and shipped from Windsor.

The building, when finished, will be the largest and most completely equipped spark plug factory in the Dominion. It will contain 15,840 square feet of floor space, and will have a production capacity of approximately 35,000 spark plugs per day. Up to the present time twelve automatic machines have been installed and it is planned to increase this number to thirty-five or forty as quickly as possible.

Taking Over Stratford Factory

New Company Formed for the Purpose of Manufacturing Electric Heating and Cooking Devices

At the first of the year the maufacturing department of heating devices of the Canadian General Electric Co., Limited, and the organizations of the Canadian Hotpoint Electric Heating Co., Limited, and the Hughes Electric Heating Co., all of Toronto, were consolidated to form a new company known as the Canadian Edison Appliance Co., Limited. This new organization will continue to manufacture the complete line of heating and cooking devices that were manufactured in the past by the above-named companies. Mr. J. R. Richardson is the managing director, Mr. F. M. Dusenberry sales manager, Mr. F. R. Goldsmith works manager, Mr. R. S. Morgan secretary and treasurer, and Mr. W. P. Young purchasing agent, all of Toronto.

The company have taken over the old Mooney Biscuit Factory at Stratford, which was recently purchased by the Canadian General Electric Co., and they will shortly commence operations in this plant. At the outset the company will employ approximately 200 hands, and the number of hands to be employed subsequently will depend entirely on the way in which business develops.

Will Make Tire Fabric

Large Factory Being Built by Manhasset Manufacturing Co., of Providence, at St. Hyacinthe

Among the latest United States companies to locate a branch plant in Canada are the Manhasset Manufacturing Co., Providence, R.I., who have formed the Canadian Manhasset Cotton Co., Limited, and are building a mill for manufacturing tire fabric at St. Hyacinthe, P.Q. The mill is of brick, 200 x 110 feet, four storeys, in which 20,000 spindles and necessary twisters and looms will be installed. In the spring a weave shed, 200 x 150 feet, two storeys high, will be erected. The company expect to start operating the first half of the mill on June 1, and the second half about October 1. The number of hands to be employed in the complete unit will be about 450. The investment amounts to $1,450,000.

New Furniture Company

Wiarton Furniture Company, Limited, Take Over the Canada Casket Factory at Wiarton, Ontario

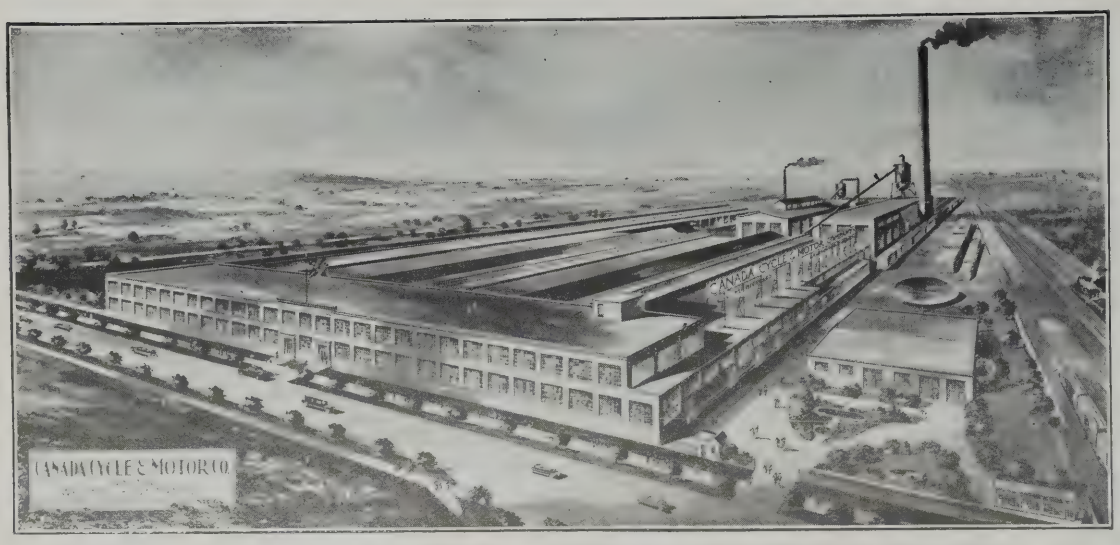
A company known as the Wiarton Furniture Co., Limited, in which several local business men are interested, has been formed to take over the Canada Casket Factory in Wiarton, which has been lying idle for the past two years. The plant will be converted into a furniture factory, and the company will manufacture a medium line of bedroom and dining-room sets. They are adding $12,000 worth of new machinery and doubling the capacity of the dry kiln. Under agreement with the town of Wiarton, they will have to employ twenty-five skilled workmen in the first year, thirty-five the second year, and fifty or more after that for eight years.

The plant was first started in a small way in 1882 by Folk, Marlock, & Wegenast, manufacturers of furniture; in 1888 it was taken over by Siemon & Hill; in 1895 Mr. Hill retired, and sold out his interest to Siemon Brothers; in 1901 Siemon Brothers sold out to the Canada Furniture Manufac-



Putting a Second Storey on Montreal Plant

Recent view of the plant of the National Acme Co., Montreal, showing progress on construction of upper storey, giving 23,650 square feet of additional space



Bicycle Factory Enlargement

Plant of the Canada Cycle & Motor Co., Limited, Weston, as it looks with recent addition of 15,000 square feet of floor space

turers Limited; and in 1906 Siemon Brothers came into possession of the plant again and operated it as a flooring factory for a short time, later turning it into a casket factory under the name of the Canada Casket Factory. Last year the town of Wiarton came into possession of the plant, and it was from the town that the present company secured it.

The factory has been enlarged several times by its different proprietors, and now has a floor space of 38,000 square feet. It is a four-storey building, and has a 125 horse power boiler and engine, and a large installation of woodworking machinery.

Will Erect Ice Cream Plant

Willard's Chocolates, Limited, Branching Out in a New Line of Industry

A new development is being undertaken by Willard's Chocolates, Limited, Toronto, in the erection of a large plant for the manufacture of ice cream. Property, 120 x 192 feet, has been secured at the corner of Manning Avenue and Dupont Street, and work has started on a building, 80 x 166 feet, of mill construction, four storeys and basement. The entire building will be occupied by the Ice Cream Division, and it is expected that the plant will be fully equipped for the production of 100,000 ice cream bricks per day by the month of March. It will be, it is claimed, the most modern and up-to-date plant of its kind in America. About 200 hands will be employed in production and distribution, and the product will be marketed in Toronto, Ontario and part of Quebec. The plant has its own railway siding, and shipments will be made direct. About a quarter of a million dollars will be expended on the building and equipment. The company have acquired a modern creamery in Picton, from which the milk used in the process will be secured.

New British Columbia Industries

Three Recently Incorporated Companies Propose to Establish Plants in Province

The Clayburn Company, brick and tile manufacturers, of Clayburn, B.C., with head office in Vancouver, have recently acquired the Kilgard Brick Works near Clayburn, and it is expected that the Clayburn Co. will have the new plant in operation very shortly. The brick produced by the Clayburn Co. has a wide market, being shipped south as far as Oregon, and east as far as Winnipeg, and the existing plant is now kept busy turning out face brick and fire brick as well as retorts

It is reported that Messrs. Gillan and Edgett, of Vancouver, are contemplating the erection of a fruit cannery and box factory in the Port Haney District in the Lower Fraser Valley. It is understood that this plant will be in operation in time to handle part of the 1920 fruit crop.

One of the directors of the firm of Thomas Summerson & Co., Ltd., of Darlington, England, was recently in British Columbia making investigations with a view to establishing a series of electric furnaces to smelt iron ore. This gentleman stated that his company had unlimited capital to back their undertaking, and providing suitable offers were made, they were prepared to start operations at once.

Mr. W. S. Burley, manager of the British Columbia Fir and Cedar Lumber Co., Vancouver, whose plant was recently destroyed by fire, has announced the intention of his company to immediately rebuild. It is expected that the new plant when completed will have a capacity of about 75,000 feet per day.

The Coast Box Company of Vancouver have in hand, with the adjoining municipality of Point Grey, negotiations for a site for the erection of a $12,000 box shook factory, it being the intention of that company to shortly branch out extensively in the export business.

Plans are completed and machinery now en route from Great Britain for the erection of a wire rope factory on Granville Island, Vancouver, for the Britannia Wire Rope Company. The new factory is to be built by British capital assisted by Mr. Robert Gibson, of Vancouver. The intention of the company is to care for the needs of the local British Columbia and Alberta markets as well as to enter the export field. Raw materials for this factory will be brought from Great Britain.

Recent British Columbia Developments

Various Industries are Branching Out at Present Time in Coast Province

Among important industries recently incorporated in British Columbia are the following:

Lumber and Pulp Wood of British Columbia, Ltd., with headquarters at 120 Bay Street, Toronto, incorporated for the purpose of manufacturing lumber and cutting pulp wood from valuable timber limits situated in the vicinity of Ahbau Lake and Willow River in the Cariboo District of British Columbia

The New Westminster Furniture Manufacturing Co., with head office and factory in New Westminster. This company intends to use native hardwoods, notably maple and birch, for the making of cheaper grades of furniture. It is estimated that at present only 5 per cent. of the furniture sold in British Columbia is manufactured here, and this company should find a ready market for its product.

Western Toy and Manufacturing Co., Ltd., with headquarters at Vancouver. The company is composed of returned soldiers, and it is proposed to run same on a co-operative basis.

Started at First of Year

New Company for Manufacturing Gimps, Bindings and Weltings, etc. Operates at Walkerville

The Hills-Jansen Co., Limited, who recently took over the plant and property of the Dale Iron Works on Walker Road, Walkerville, started operations on January 1st with a working force of 25 employees. They are engaging in the manufacture of gimps, bindings, weltings and trimming of artificial leather for the automobile and furniture trades; also door liner boards and other flat artificial leather-covered pieces. A power sewing machine department has been installed which can take on contract work of any nature. The plant has a floor area of 6,000 square feet at present, but the company expect this summer to enlarge the premises.

The industry is an offshoot of the Jansen Mfg. Co. of Detroit, but is strictly a Canadian corporation, operated entirely distinctly from the parent concern. Mr. W. B. Jansen, president of the Jansen Mfg. Co., is president; Mr. S. W. Jansen, secretary-treasurer of the Detroit company, is secretary-treasurer, and Mr. C. A. Hills, who is factory manager of the Jansen Mfg. Co., is vice-president and general manager.

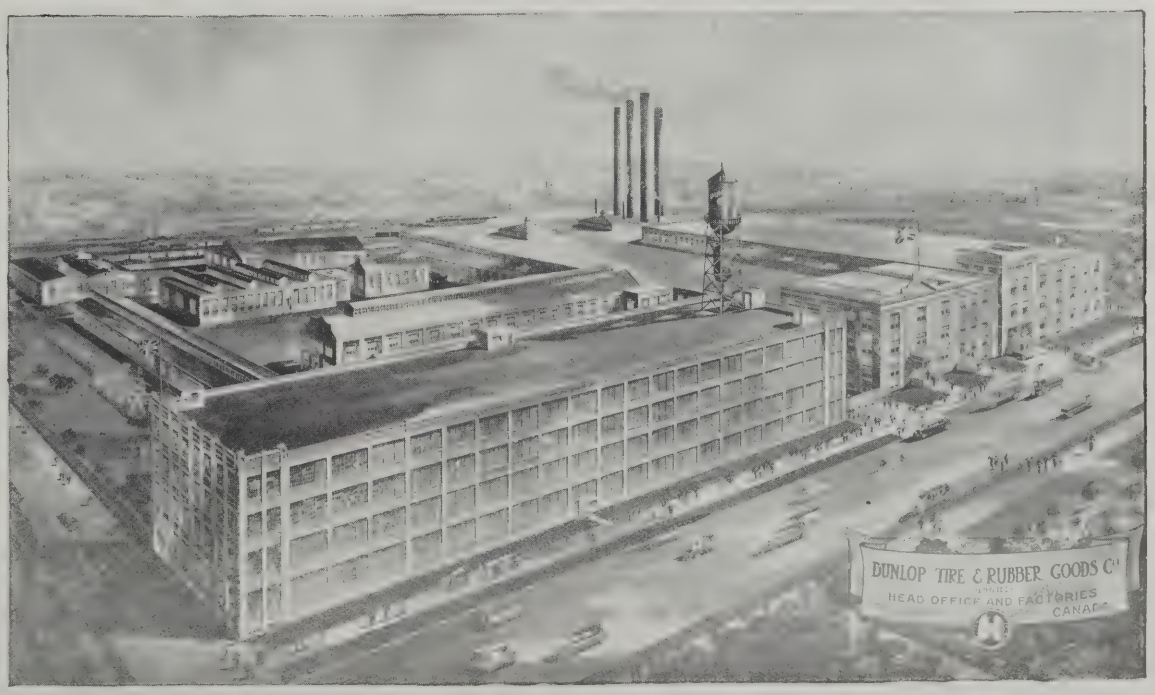
Dunlop Rubber's Expansion

Million and a half Appropriated for Erection of Another Factory in Toronto

As indicating the growth of the automobile tire industry in Canada and the extent to which the Dunlop Tire & Rubber Goods Co., Limited, are participating in this business, the announcement that this company have set aside an appropriation of $1,500,000 for building and equipping another factory in Toronto is significant. The new building, which is now well under way and being rushed to completion, is 400 feet long, 80 feet wide, with four storeys and basement. It faces on three streets — Queen, Booth and Natalie. This latest factory will be devoted especially to the manufacture of Dunlop Cord Tires — "Traction" and "Ribbed" — the success of the present Dunlop Cord Tire having been so instantaneous.

The Dunlop rubber interests are not confining their programme of expansion to Canada. A new company, Dunlop America, Limited, to operate in the United States, has been launched. This new company will operate on a huge scale.

The Dunlop Tire & Rubber Goods Co., Limited, with headquarters in Toronto and branches in the fourteen leading cities of Canada, have working arrangements, not only with Dunlop in England, but Dunlop in France, Japan, etc. These arrangements constitute interchange of formulæ, scientific research, processes and methods. Such arrangements will now likewise be made betwen Dunlop in Canada and Dunlop in the United States.



As the New Canadian Dunlop Factories are Going to Look when the $1,500,000 Addition is Completed in the Spring of 1920

Another for Peterborough

Third Branch Plant of United States Industry to Locat Last Year in this City

Announcement is made that the Canadian Aladdin Company, the Canadian branch of the Aladdin Company, Bay City, Mich., have arranged with the city of Peterborough for a site of about six acres on which to erect a factory and for a fixed assessment of $5,000 for ten years. The company will erect a building 100 x 200 feet and invest $70,000 in building and plant. The factory is to be erected, equipped and in operation before September 1. At the outset the company expect to employ from 30 to 40 men, but fully expect expansion and have an option on an adjoining five or six acres. They manufacture ready-cut houses, and at the parent plant employ 500 men. This was the third company to decide to locate in Peterborough in 1919, the others being the Western Clock Co. of La Salle, Ind., and the Nashua Gummed & Coated Paper Co. of Nashua, N.H.

New Glove Industry

Two Waterloo Men Form Company to Manufacture Workingmen's Gloves and Mitts

Under the name of the Quality Glove Co., Messrs. G. S. Raymond and H. H. Becker have established a new industry in Waterloo, Ont. They have leased the Hohmeier Block on King Street and commenced on December 15, the manufacture of workingmen's gloves and mittens. Starting with five or six hands, they hope to be in a position to increase this number by fall. The building occupied is large enough to admit of considerable expansion.

Freight Claims and Their Collection

Recording the Evidence of Damage or Loss of Goods in Transit—Why All Case or Package Goods Should be Opened Promptly—Time Limit in Which to File Claims, etc.

By F. R. ALLWARD

Transportation Department, Canadian Manufacturers Association

Second Article

AT stations where it is customary for the railways to send a notice of arrival to the consignee, through the mails, great care should be exercised to ensure that none go astray after delivery by the post office. Controversies sometimes arise as to whether or not the carrier has complied with the regulations in sending out this notice, and the receiver of freight should be in a position to prove from his records the exact date same was received; or if not received, then proof that it was not delivered by the post office. This precaution is important for the following reasons:

(1) Heavy storage or demurrage charges assessed if goods not removed within 48 hours after notice of arrival; or 72 hours in the case of bonded freight.
(2) Carrier only liable as warehousemen for goods not removed within the free time limit.
(3) Bonded goods will be sold by the Customs Department at public auction, if entry not made and duty paid within one month from arrival.

The importance of the arrival notice applies principally to L.C.L. shipments and carload lots delivered from public team tracks. Consignees served by private sidings or industrial interchange tracks must keep a close check of cars arriving, as delivery of such shipments in the usual manner is deemed due and sufficient notice of arrival thereof.

Receiving Freight

Less than Carload.—At many of the principal stations throughout Canada the railways have appointed cartage companies to act as their agents in picking up and delivering L.C.L. shipments, and the employees of the said cartage companies are empowered to sign bills of lading and to accept receipts for goods delivered. Where such an arrangement is in operation it is incumbent on the consignee's receiving clerk to examine carefully every shipment, for the purpose of detecting any shortage or damage before giving the teamster a receipt. Should a shortage be found, or if any of the packages bear indications of damage, such as a broken case, a rattling sound indicating broken parts, leakage from a liquid container, etc., a careful notation of the same should be made on the face of the No. 2 freight receipt (in ink) before signing. He should also make the same notation on the No. 3 freight bill, and request the teamster to sign it. This the cartage company's representative may refuse to do, as explicit instructions have been issued in some instances prohibiting this practice.

Railway officials take the view that notation of damage or shortage on the No. 2 freight receipt fully protects the consignee, and that the local freight agent fully complies with the regulations by filling out an "Over, Short and Damage" report, a copy of which is mailed to the freight claim agent.

If the consignee is required to arrange for his own cartage service, the teamster should be instructed to take the same precautions outlined above, when accepting shipments from the railway freight sheds, and make a careful report of the exact facts to the receiving clerk on returning with the goods.

Carload.—The railways will furnish a checker for carload freight delivered from public team tracks, but not for private siding delivery. Extra precautions, therefore, have to be taken by the consignee in unloading freight direct from car to warehouse. A record of the numbers on the car seals must be taken and the seal fastenings examined to determine whether or not they have been tampered with in transit. It is also advisable to take note of the condition of the doors, hinges, etc., as it has been proved in some instances that goods can be extracted from the car without tampering with the seals.

If the contents check short, or if some of the goods are found in bad order, it is quite necessary to immediately notify the local freight office by telephone, in order that the inspector may have an opportunity of verifying the damage or shortage, as the case may be.

In every instance a telephone message should be confirmed by letter, as it may become necessary to finish unpacking or to use some of the goods if the inspector does not call within a reasonable period.

It every case it is very important that the receiving clerk should make a careful record in writing of all the facts relating to the particular shipment involved, in order that he may be prepared (if necessary) to make a sworn statement at some later date in support of claim.

Receiving Record.—Most progressive houses now have a printed form for recording the receipt of all material, and in so far as freight and express shipments are concerned, too great care cannot be exercised by the receiving clerk in reporting all particulars to the office. The essential facts should include:

Name of shipper; point of origin.
Name of railway; inward pro number.
Car number and seal numbers (in the case of a carload shipment).
Description of goods; number of packages.
Particulars of shortage (if any).
Nature of damage (if any),

and any other information that may be deemed relevant or necessary. If the form furnished does not provide sufficient space to include all the information, a separate report can be made. Whatever method is followed, the records should be sufficiently broad in scope to enable the receiving clerk to make a sworn statement at some later date without depending on his memory for the essential facts.

Concealed Loss or Damage

The terms "concealed loss" and "concealed damage" indicate that the loss or damage is of such a nature that it is not evident when the shipment is delivered by the railway to the consignee. For example, a shipment of glassware is received in apparent good order, so far as the ex-

ernal appearance of the packages is concerned, but on opening the cases or barrels the entire contents may be found roken.

In another case, a consignment of rubber footwear packed n cases may bear every indication of good order when elivery is accepted by the consignee and yet, when unacked, several pairs of rubbers may be found short in every ase.

In view of the opportunity for fraud in claims for concealed damage or loss, it is easy to understand the reluctance shown by claim agents in allowing such claims, unless substantiated beyond reasonable doubt, and it is of the utmost importance that they be supported by the most complete and convincing evidence.

In the very nature of the case it is exceedingly difficult for a railway to verify such alleged damage or losses. Therefore claims must be supported by clear and detailed affidavits of the shipper as to the condition of the goods and packages shipped, and of the contents of the various packages if the shipment consists of a number of separate articles, also by affidavits of any parties who handled the shipment after it left the shipper and before delivery to the railway. If from the nature of the shipment there could have been any opportunity for pilfering, tampering or damage while in the custody of private draymen at either end, affidavits should be secured from them and included in the claim, to the effect that the packages were not tampered with while in their possession.

Affidavit Should Be Clear

The affidavit of the parties receiving the goods should be clear and explicit as to the contents of the packages when opened, and also as to the fact that there was no opportunity for tampering, pilfering or damage during the period between the delivery by the carrier and the time when the packages were opened and when the loss or damage was discovered.

Necessity for prompt unpacking.—It will be readily perceived from the above remarks that a consignee can in no instance be certain that goods have not been tampered with or damaged in transit, and if he desires to avoid any controversy with the railway in regard to the possibility of damage or pilferage after delivery, all case or package goods should be unpacked as promptly as possible after receipt. If the contents are then found not to be in order he should notify the local freight office immediately, requesting that an inspector be sent to his place of business for the purpose of verifying his report. In no case should the receiver of freight neglect to confirm a telephone message of this nature by letter, as the inspector may be engaged elsewhere at the time and the party receiving the message is quite likely to forget about it. This precaution is important, and if the inspector does not call at the consignee's place of business within 48 hours he should again telephone the local freight office and ask permission to speak personally to the local freight agent. If this procedure is followed prompt action will in all probability be obtained, as the agent will usually prove to be a man who is anxious to co-operate with the patrons of his company.

The precautions outlined above apply with double force to imported goods, for the following reasons:

Bonded goods.—Section 73 of the Canada Customs Act specifically provides that claim for refund of duties paid on damaged goods must be made within fourteen days from the date of arrival, or three days in the case of glass. This claim must be made by the consignee or the party paying the duty, and it should be distinctly understood that railway claim agents will not entertain a claim in which duty is included. The Department of Customs, on the other hand, will also refuse to entertain the claim for refund unless a customs inspector has an opportunity to examine the goods within the time limit outlined above.

Damage to Machinery, etc.

Appraising damage.—Machinery while in transit is frequently damaged in such a way that it is impossible to repair it by the substitution of new parts. While it may be possible for a machine to be put in shape for operation by welding, etc., yet its usefulness may be permanently impaired. The loss involved is usually considerable, and if the consignee and the railway inspector are unable to agree on a figure, a third party should be called in to make an appraisal. The appraiser must of necessity be a man thoroughly conversant with machinery, or whatever class of goods may be involved, and when he has made an estimate he should be requested to sign a sworn statement setting forth the nature of the damage, extent of depreciation in value, and other relevant facts.

The services of an appraiser can also be used to advantage where it has not been possible to arrange for the visit of an inspector, especially if the amount involved is considerable.

Salvage.—It is, generally speaking, the duty of the consignee to take delivery of a shipment even though damaged, and afterwards present a claim against the railway. Unless the damage is of such a nature as to completely destroy the value of the entire consignment, he should receive the goods and dispose of them to the best advantage. The measure of damage he is entitled to recover will be the difference between the amount he would have realized had the goods not been damaged and the amount actually realized.

Preparing and Filing Claim

If the procedure outlined above has been carried out, the claimant has now all the documents and information together and is ready to prepare his claim.

Standard form for presentation of claims.—In the first article published in INDUSTRIAL CANADA for December, a list of the documents required in support of a claim was outlined briefly. Many shippers and receivers of freight will be interested to learn that the principal railways in Canada have adopted a standard form for the presentation of loss and damage claims, also one for overcharge, and copies may be obtained from any local freight agent. The use of these forms is not compulsory, but undoubtedly they simplify the work of the claim agent and thus enable him to arrange settlement more promptly. However, the use of any form designed to meet the needs of any particular filing system will prove equally acceptable to the claim agents, provided provision is made for furnishing all the essential facts.

Amount of claim.—The amount which can be recovered by claim for loss, damage or shortage depends partly on the circumstances governing the loss, and partly on the conditions of the bill of lading under which the shipment was made.

Where claim is filed to recover the total value of a consignment lost in transit, or where the goods are so badly damaged as to destroy the value of the entire consignment, the amount of the claim should be limited to the market value at time and place of shipment, plus the freight charges if prepaid. A claim should not be filed for more than this amount because it will be declined and cannot be enforced.

The above provision does not apply where, irrespective of the actual value of the shipment, the shipper has agreed with the railway that, for the purpose of obtaining a lower rate of transportation, the value of the shipment shall be

limited to a certain amount—usually less than the invoice price. This is termed "*Released Valuation*," and in the event of loss the claimant cannot properly ask for anything more than the amount agreed upon.

The considerations outlined above governing the amount which the claimant is entitled to recover apply also to partial loss or partial damage, except where it is necessary to dispose of the goods for what they will bring in the open market or where the damage is of such a nature as to permanently impair the value or the use of the goods. These exceptions are treated separately under the headings "*Salvage*" and "*Appraising Damage*."

It is of great importance where settlement is requested on the basis of the invoice value that the items covering the particular portions of the shipment which are short or damaged should be specifically set forth in the itemized bill rendered. The item for return of freight charges should be based on the proportion of the freight charges covering the portion of the shipment lost or damaged and for which claim if filed.

Duty.—Unless specifically provided for in the conditions of carriage on the back of the bill of lading, the amount of duty should not be included. As indicated under the heading "*Receiving Freight*," a claim for refund of duty may be filed with the Customs Department, provided same is presented within fourteen days of the arrival of the shipment; or in the case of glass, three days. This privilege should always be taken advantage of as, under the terms of carriage governing shipments from the United States, duty is not recoverable from the railways.

The Filing of Claims

Filing.—As previously outlined, claim may be served on the local freight agent or forwarded direct by mail to the freight claim agent. Whatever method is followed, copies of all documents should be retained by the claimant, and when presenting a claim to the railway same should be accompanied by a letter. This precaution is very necessary, as original papers often go astray and it is then necessary for the claimant to prepare duplicates.

Time limit for filing.—Under the terms of the standard bill of lading, notice of loss or damage must be made in writing to the carrier at the point of delivery, or to the carrier at the point of origin, within four months after delivery of the goods (six months on shipments from the United States). Should the claimant find it impossible to get all the necessary documents together within that period, it would be well to notify the railway by letter of his intention to enter claim at some later date.

Shipments lost or delayed.—In the case of non-delivery the consignor or consignee is required to notify the carrier at point of origin or destination within four months (six months on shipments from the United States), after reasonable time for delivery has elapsed. In some instances the owner of a consignment of goods may have engaged with the carrier in an active investigation to determine the whereabouts of the shipment, and in the belief that same will eventually turn up, he neglects to enter claim until it is too late. It is therefore considered expedient by some experienced shippers (when requesting the railways to trace a shipment) to add a clause to either letter or printed form, reading substantially as follows:

> "*This request is notification to you that claim will be instituted if goods are not delivered.*"

The use of the above, or a similar clause, fully complies with the bill of lading terms and enables the owner of the goods to file a claim within a reasonable period thereafter.

Use of telephone not reliable.—Where a claimant follows the practice of submitting claim to the local freight agent, he should discourage the use of the telephone by his staff in negotiating with the local freight office in regard to settlement, unless information is desired in a hurry, in which event conversation should be immediately confirmed by letter.

If the local freight agent is unable to advise definitely prospects of settlement within a reasonable period, he should be requested to furnish particulars of correspondence, claim reference number, etc., in order that the matter may be taken up direct with the claim agent by correspondence.

Follow-up System Needed

A follow-up system should be adopted for negotiating settlement, and a letter addressed to the claim agent should be despatched at regular intervals. If a separate file is kept for each claim and copies of all correspondence attached thereto, it will simplify the investigation and thus avoid the matter being overlooked.

Reasonable time for settlement.—There is a great diversity of opinion in regard to what constitutes a reasonable period in which a claim can be investigated and an adjustment made with the claimant. This is due principally to the fact that the same method cannot be followed in investigating any two claims, and it will be readily understood that a claim covering damage to a shipment handled by two or more lines will take a greater length of time to investigate than one covering damage to a shipment handled by only one line.

There are many other conditions which govern the length of time involved in investigating a claim, but it is not possible within the scope of this series to cover the entire field. It is therefore a matter for the claimant to determine from the known conditions affecting any particular claim what constitutes a reasonable period within which settlement should be obtained; but in every instance the investigation and negotiation with the claim agent should be kept alive.

Interest on over-charge claims.—The conditions governing the investigation of claims for loss or damage do not apply to claims for overcharge, and if the claimant furnishes the railway with all particulars and tariff authority for the rate claimed, settlement should be obtained within a period of thirty days. It is, unfortunately, true that even claims of this nature are not settled promptly, and if the amount involved is large it is expedient for the claimant to have inserted in his claim the following clause, or one similar:

> "*Interest is demanded on this claim at time of settlement for elapsed time in excess of thirty* (30) *days from date of claim, at the rate of six* (6) *per cent.*"

If this suggestion is complied with, the claimant can compel the carrier to pay interest on all overdue claims covering freight charges collected in error.

Suing the Carrier

Suing the carrier. It is the opinion of authorities on railway law that a freight claim should not be taken to the courts for collection until all other methods of negotiating settlement have been exhausted, and with this view the majority of claimants are in accord. The expenses incurred for legal fees, etc., are usually considerable; but if the claimant is unable to obtain reimbursement within a reasonable period and is of the opinion that he has a *bona fide* claim, he has, of course, the option of suing the carrier. However, before taking this action, members are urged to take the

uestion up with the Transportation Department of the anadian Manufacturers' Association, as there are many gal questions involved which determine whether or not ie amount claimed can be recovered through the courts.

The main purpose of discussing this phase of freight aim collection is to bring to the attention of the members ie law governing shipments originating in the United tates. Under the conditions governing standard bill of ding in use in that country, suits for loss, damage or elay shall be instituted *only* within two years and one ay after delivery of the property; or in case of failure to ake delivery, then within two years and one day after easonable time for delivery has elapsed.

The legality of this provision has for some time been ie subject of discussion in the United States and a test ase has been submitted to the Interstate Commerce Commission for a ruling. Until such time, however, as a definite uling or decision is announced, receivers of freight in this ountry should be governed accordingly in negotiating set- ement of claims. Needless to say, great care must be xercised in preventing all claims of this nature from laps- ng, and if there is any indication that the investigation is eing unduly delayed by the carriers, steps should be taken o enter suit within the time limit allowed.

A Shipper's Problems

In the February issue of INDUSTRIAL CANADA the problems f the shipper will be discussed. This should prove of par- icular interest to the manufacturer who has adopted the olicy of entering claims on behalf of his client.

Heated Car Service

Case Has Not Yet Come Up in the East but Manufacturers Will Be Advised of Change

The Canadian Freight Association has filed with the Board of Railway Commissioners an application for an in- rease in the charge for use of heated refrigerator cars from he present 1c. per car per mile—minimum $2.00—to 1½c. per ar per mile—minimum $2.00.

At the hearing before the Board of Railway Commission- rs in Winnipeg the carriers were able to show that there as an increase in their costs, and in view of the evidence ubmitted by the railways, representatives of the shippers ntimated to the Board that under the circumstances they ould offer no objections. The case has not yet come up in he East, but in any event the last order of the Board deal- ng with this matter will have to be rescinded before the ailways can make an increased charge.

Manufacturers who are interested in this service will be dvised of the increase proposed.

Track Scale Weight Allowances

No Order Yet Issued by the Board of Railway Commissioners Following Judgment of September 9

The Board of Railway Commissioners issued a judgment n September 9th, 1919, dealing with the question of track cale weight allowances, evidence in connection with which as heard in 1911. No order has as yet been issued by the Board, but as a matter of information it might be stated hat the maximum allowance for dunnage is set at 650 lbs. er car. This maximum is to apply on agricultural imple- ments, machinery, stoves, street cars, and vehicles; also such ther articles as may be shown from time to time to require unnage protection. The tolerance allowed for variation in tare, due to accumulation of snow, ice, etc., is to be 1 per cent. of the weight shown on the bill of lading, with a minimum of 500 lbs. and will apply on all carload freight including coal and coke, except that when ashes, clay, gravel, sand, etc., are loaded in open cars, the minimum allowance for tolerance will be 1,000 lbs.

Cancel Tariffs

Stop-off Arrangements on Hay, Potatoes and Grain, to be Cancelled on February 1

The Canadian Freight Association have announced that—ffective February 1, 1920,—tariffs providing stop-off arrangements on hay, potatoes and grain products at Montreal and Toronto will be cancelled.

It is pointed out, however, that this will not affect the milling-in-transit of grain, or the dressing, sawing, kiln-drying or sorting-in-transit of lumber.

Marking Express Shipments

When Returning Goods to Department Stores and Factories they Should be Properly Marked

Departmental stores and manufacturing concerns have been experiencing great difficutly in determining the name of the shipper of certain parcels returned to them for exchange or repairs. The Express Traffic Association of Canada have accordingly issued a circular, which will be given wide distribution, calling upon both their agents and shippers to see that any such parcels bear the name and address of the shipper. These marks should appear on the outside of the package, and the same information, if possible, should be placed inside the package in case the outside mark is lost or destroyed.

Members of the C.M.A. are requested to endeavour to carry out these instructions..

Cartage Rates

More Articles Added to the List of Exceptions in the Carriers' Cartage Tariff

The carriers in Eastern Canada have added to their list of exceptions in the cartage tariff the following articles: Electric cooking appliances and electric heaters. This change will take effect on January 15, 1920. At the present time such articles will move at the regular cartage charges, whereas after the change becomes effective they will be charged in accordance with the regulations of the cartage companies at different points. The change will, of course, mean an increase in the rates, as all articles in the list of exceptions are carried at higher rates than the regular cartage charges.

Correction.

On page 74 of the September issue of INDUSTRIAL CANADA cartage rates were shown applying at the different cartage points in Eastern Canada. Through a typographical error the new less-than-carload rate shown opposite Windsor and Walkerville appeared as 5c., whereas the correct rate is 5½c.

Canadian Court Rules on F.O.B.

Defines Meaning of this Term in Decision Handed Down in Kingston, Ontario

A decision of interest to manufacturers and exporters was recently rendered by a Canadian court. It related to the commercial expression "f.o.b." and made a ruling as to the significance of the term. The court held that the term "free

on board" means that the seller, at his expense, places the goods on the car or vessel which is to carry them from the point specified, and that the buyer takes the risk onwards; at the same time the goods must, at destination, be in conformity with the conditions of sale or they may be legally rejected. Further, it is necessary to distinguish delivery from acceptance; for, said the court:

"The carrier is the agent of the purchaser, but his mandate is limited to the transportation of the goods. The question to decide is whether it was the thing sold that was carried from the point of shipment. If the vendor has correctly delivered the thing sold, the buyer becomes the proprietor immediately. If he delivers something else—for instance, if he has sold goods of first quality and delivers goods of second quality—there is no delivery of the thing sold. The buyer can refuse them only when they arrive at their destination.

New European Service

Monthly Service Inaugurated between St. John and Norway, Sweden and Denmark

The Canadian Pacific Ocean Services, Limited, who are acting as agents for the Norwegian American Line, announce that a monthly service has been inaugurated from West St. John to parts in Denmark, Norway and Sweden. The first sailing will be the S.S. *Drammensfjord* about January 5th, to be followed by the S.S. *Ranenfjord* early in February. This service has been established in order to encourage development of trade between Canada and these ports.

From information which the Transportation Department has recently received from Mr. C. J. Sontum, Canadian Commercial Agent at Christiania, it would appear that there is an opportunity of securing business in the following lines: Boots and shoes, clothing, chocolates, apples, plums and dried and canned fruit, cheese, bacon, wheat, canned and chilled meats. It is hoped that any members who are in a position to do any business in these commodities will endeavor to support this service.

The Department is also advised by Mr. E. N. Todd, General Foreign Freight Agent of the Canadian Pacific Railway, that he has been advised by the president and chairman of the Norwegian American Line, that the Import and Export Agents' Association of Christiania, Norway, are a very reliable and desirable firm for Canadian houses to use.

Steamship Sailings

Ships Scheduled to Sail in the Near Future from Atlantic Ports

Portland to Liverpool. 1920

Rimouski ..... White Star-Dominion Line.... Ab't Jan. 27
Canada ..... White Star-Dominion Line .... Ab't Feb. 13

Portland to London.

Ardgoil ..... Cunard Line ..... Ab't Jan. 31

Portland to Glasgow.

Saturnia ..... Anchor-Donaldson Line ..... Ab't Jan. 24
Cassandra ..... Anchor-Donaldson Line ..... Abt. Feb. 4

Portland to Avonmouth.

Turcoman ..... Dominion Line ..... Ab't Jan. 31
Cornishman ..... Dominion Line ..... Ab't Feb. 7

Portland to Leith.

Cairnvalona ..... Thomson Line ..... Ab't Feb. 1

West St. John to Liverpool.

Empress of France.. C.P.O.S. Line ..... Ab't Jan. 21

West St. John to Glasgow.

Batsford ..... C.P.O.S. Line ..... Ab't Jan. 16

West St. John to Avonmouth.

Vellavia ..... Cunard Line ..... Ab't Feb. 1

West St. John to Manchester via Halifax.

Manchester Division . Manchester Liners ..... Ab't Jan. 18

West St. John to Antwerp.

Caterino ..... C.P.O.S. Furnese Lines (Furn.) Ab't Jan. 17

West St. John to Havre.

Georgie ..... Compagnie Canadienne Transatlantique ..... Ab't Jan. 17

West St. John to Belfast.

Carrigan Head ..... Head Line ..... Ab't Jan. 20

West St. John to Dublin.

Dunass Head ..... Head Line ..... Ab't Jan. 25

West St. John to Montevideo, Buenos Aires and Rosaria (South America).

Clan Skene ..... Houston Lines ..... Ab't Jan. 30

West St. John to South Africa, Cape Town, Port Elizabeth, East London, Durban and Delagoa Bay.

Jekri ..... Elder Dempster Line ..... Ab't Jan. 30

West St. John to Australasian Ports. Melbourne, Sydney, Auckland, Wellington, Lyttleton, Timaru.

Opawa ..... New Zealand Shipping Co. .... Ab't Jan. 30

St. John to Liverpool.

Canadian Rancher .. Can. Govt. Mer. Marine Ltd. .. Ab't Jan. 22

Halifax to Liverpool.

Canadian Seigneur .. Can. Govt. Mer. Marine Ltd. ... Ab't Feb. 2

Halifax to Glasgow.

Canadian Trapper ... Can. Govt. Mer. Marine Ltd. ... Ab't Jan. 19

Halifax to Barbados, Trinidad and Demerara.

Canadian Gunner ... Can. Govt. Mer. Marine Ltd. ... Ab't Jan. 18

Halifax to Rio de Janeiro, Santos, Brazil and Buenos Aires, Argentine.

Canadian Pioneer ... Can. Govt. Mer. Marine Ltd. ... Ab't Jan. 20

West St. John to Liverpool.

Empress of France .. C.P.O.S. Line ..... Ab't Jan. 21

West St. John to London.

Mendip Range ..... C.P.O.S. Furness Line (Furness) ..... Ab't Jan. 20

West St. John to Manchester.

Manchester Division . Manchester Liners ..... Ab't Jan. 18

West St. John to Havre (France).

Georgia ..... Can. Trans. Atlantic Line .... Ab't Jan. 17

West St. John to Buenos Ayres, Montevideo and Rosario.

Clan Skeene ..... Houston Lines ..... Ab't Jan. 30

St. John to Kingston, Jamaica and Havana, Cuba.

Canadian Warrior .. Can. Govt. Mer. Marine Ltd. ... Ab't Feb. 2

Halifax to Rio de Janeiro, Santos, (Brazil) **Buenos Ayres,** (Argentine).

Canadian Pioneer ... Can. Govt. Mer. Marine Ltd. ... Ab't Jan. 20

Halifax to Barbados, Trinidad and Demerara.

Canadian Gunner ... Can. Govt. Mer. Marine Ltd. ... Ab't Jan. 18

European Traffic

Canadian Express Company Issues Circular Pointing Out Services it Can Render

The Canadian Express Company have issued a circular signed by the president, John Pullen, directing attention to the assistance they are prepared to render in the development of foreign business. The company are equipped to take charge, as agents of the shippers, of the forwarding of goods to their final destinations in the interior from the landing ports of the ocean steamers, including the clearance through customs and the distribution of goods. The company's European organization, with headquarters in London, maintains suitably equipped branches at the large centres, with agencies throughout the continent of Europe, who will extend every convenience and facility to Canadian shippers.

The Royal Bank of Canada recently announced the opening of a branch at Montevideo, Uruguay, with correspondents throughout the country. They will transact a general banking business and special attention will be given to collections.

New Tariff Regulations

Automobile Parts

Rates of Duty to Apply on Parts, Finished and Unfinished, and Auto Accessories

The following articles, when shipped and billed separately for manufacturing purpose or for repair, are dutiable at the rates set out opposite each item:

Description.	Tariff item.
Acetylene tanks (brass)	352
Aluminum castings	354
Ammeters	453
Anti-skid rivets (steel)	454
Automobile covers (tops)	438
Axles	392
Ball bearings	453
Battery box brass, parts	352
Bearings	453
Bells	352
Belts, fan, leather	609
Bent wood work, unfinished	506
Bodies, complete	438
Bodies, steel, unfinished and upholstered	454
Boilers	453
Boiler parts of iron or steel	454
Bonnets	454
Brakes	454
Brake drums	454
Brake band lining, asbestos only	312
Brake band lining, asbestos with brass wires embedded therein	352
Brake band lining, cotton, with brass wires embedded therein	352
Brass castings	352
Brass pipe fittings	352
Carbide	711
Carburetors	352
Castings, rough, according to material	352, 354, 453
Chain repairers, according to material.	
Chain adjusters	454
Chain guards, according to material.	
Chains, non-skid	454
Charging apparatus, electric	453
Chassis	438
Clips and clamps, iron or steel	454
Clocks	368
Clutches, iron or steel	454
Cocks, brass	352
Commutators	453
Cushions, according to material.	
Cyclometers	657
Dashes and fenders, according to material.	
Differential gears	453
Dust shields, according to material.	
Electric auto motors	453
Engine packing, rubber	619
Engine parts, integral, if iron or steel	453
Felt washers and dust rings	567
Foot bellows for horn, leather	613
Forgings	393
Frames, or with engines attached but without axles or springs	454
Fuel level indicator, brass	352
Gasoline auto engines	453
Gasoline engine fittings, brass	352
Gasoline syphon, brass	352
Gasoline tank gauges, brass	352
Gear cases, according to material.	
Gears, differential	453
Gears and pinions, iron or steel, steering	454
Generators, acetylene, brass	352
Grademeters	657
Grease cups, brass	352
Hampers	622
Horns, brass, if not plated	352
Horns, brass, if plated	362
Hose clamps and menders, according to material.	
Housing, axle, according to material.	
Hubs, with sprockets attached	454
Igniters	453
Ignition apparatus	453
Ignition batteries	453
Iron castings, rough	453
Iron castings, finished, if engine parts	453
Iron castings, otherwise	454
Insulators	453
Jacks, according to material.	
Lamps	435
Lamp brackets, according to material.	
Lamp parts, metal	435
Lamp storage batteries	453
Lock nuts, iron or steel	454
Lubricators, according to material.	
Luggage carriers, racks of iron or steel	454
Mats, rubber	619
Moto-meters	657
Mud guards, according to material.	
Mud guard attachments, according to material.	
Mufflers, according to material.	
Odometers	657
Oil cans, brass	352
Oil cups, brass	352
Oil guns, brass	352
Oil hole covers, brass	352
Piston rings	453
Portable electric lights	435
Pressed steel body frames	454
Pressed steel channels and angles	454
Pumps, tire, according to material.	
Pumps, oil, according to material.	
Pumps, water, according to material.	
Pumps, brass, circulation, according to material.	
Pump connections, according to material.	
Pumps, iron or steel, operated by engine	453
Radiators, iron or steel	454
Rims, steel	454
Roller bearings	453
Spark coils	453
Spark gaps	453
Spark plugs	453
Speed indicators	657
Springs, vehicle	392
Sprockets	454
Steel balls	491
Steering apparatus, according to material	
Steering knuckles, according to material.	
Steering wheels, according to material.	
Steering levers, according to material.	
Steering yokes, according to material.	
Steps, according to material.	
Storage batteries	453
Switches, electric	453
Tanks, iron	454
Tanks, copper	352
Tires, rubber	592
Tire protectors and anti-skids, according to material.	
Tire repair kits	592
Tire repair tape	562
Tire repair tools, according to material.	
Tire valves and stems	592
Tool bags	622
Tops	438
Transmission gears	453
Universal joints, according to material.	
Valves, engine, if iron or steel	453
Vaporizers, brass	352
Volt ammeters	453
Volt meters	453
Vulcanizers, according to material.	
Wheels	438
Windows, curtain, according to material.	
Windshields, according to material.	

Customs Rulings

Questions that Have Come Up for Decision Recently Affecting Tariff Interpretation

Garnetted artificial silk thread waste, ruled to be dutiable under item 760.

Road graders (per illustration), ruled to be dutiable under item 453.

Bronze memorial tablets (sample), ruled to be dutiable under item 352.

Until otherwise advised, the following machines, specially adapted for use in the manufacture of woollen textile fabrics, may be entered under tariff item 468:

Shake willow or wool waste duster; duster willow machines; kicker fulling mills; rag dusters; warping machines; wool opener and mixer; soaping and wringing machine; dyeing machines of all kinds; drum spool winders and pressure drum spool winders; yarn reel, with counting motion; dead spindle spooler and bobbin stand; spooling and doubling machines; fearnaught pickers; ring twisters.

The following are considered to be of a class or kind made in Canada:

Galashiels fulling mills; cloth washing machines; card creels.

Mixtures of soda ash and bicarbonate of soda in varying strengths, per sample submitted, declared to be dutiable under tariff item 711.

Under Board of Customs' decision above on combinations of soda ash and bicarbonate of soda, the following materials would be dutiable under tariff item 711: Wyandotte's sanitary cleaner and cleanser, dairyman's cleanser and cleaner, brewer's and bottler's cleaner and cleanser, baker's and confectioner's cleaner and cleanser, butcher's cleaner and cleanser, engineer's cleaner and cleanser, yellow hoop, tanner's soda, textile soda, Rhode's E-Mul-So cleaner, Rhode's cleaner, Wil-

(*Continued on page* 235)

A Review of 1919

An Address Delivered by Sir Edmund Walker, President of the Canadian Bank of Commerce, to the Shareholders of the Bank at the Recent Annual Meeting

We have passed through a year in which the daily surprises have been as perplexing as during the war, and in which the anxieties have been as great, except that sometimes they affected rather the mere happiness of the world than human life itself. War, however, still continues in many countries, and there and elsewhere many have died from lack of food. The war has been won by the most superb co-operation in the attainment of one ideal—the winning of the war. We may lose all that victory seemed to secure by indulgence in countless theories, many of them aiming at the disintegration of society, instead of again co-operating in one ideal—the restoration of order and the improvement of social conditions, so that the happiness of the greatest number may be secured. It is not by standing idle while we discuss methods that we can get out of our present troubles. If the call is to "man the life boat" we do not wait for academic discussion before the boat is launched on its life-saving mission, and too much argument between capital and labor, just now, is madness in view of what we seek to save. The rising curve of prices cannot be made to turn downward without an increase of production, nor can we face the heavy obligations left by the war except by greatly increasing production. The man who does not do his best at his particular job is not merely helping to barricade the only pathway that will lead us out of our troubles, but he is helping to raise, or to maintain, the cost of the necessities of life for his own family. I may be called a friend of capital for saying this, but I am on record elsewhere as an advocate of many changes in the present relations of the employee and employer, all of them in favor of the employee.

INSUFFICIENT PRODUCTION

While we and the rest of the world are failing to produce on a sufficient scale to provide for human comfort and to pay our debts, the price of everything has so increased, that although all clearing-house and trade returns show higher figures in money, these generally represent transactions based on smaller quantities of merchandise, and because we think in terms of dollars and not of merchandise, we are living in a fool's paradise. The imperious demands of war rapidly raised all prices, and payment was only possible by inflating the currency; unfortunately inflated currency sustains and further increases prices. If with our own currency we bought only goods made in our own country, the minimum of harm would be done, but possessing more currency and fewer commodities than usual, we are acting like the drunken sailor newly come ashore, and buying everything that fancy suggests, whether necessary or not, without regard to whether it is made in Canada or abroad. For every purchase of goods made abroad, whether in Great Britain or China, or anywhere else, we settle through New York, and the rise or fall of the rate of exchange, about which we are so much concerned, is the expression of our failure, or the reverse, to pay cash or its equivalent. In this connection the speaker has for many years, at these annual meetings, presented the facts of our foreign trade, the peculiarities of our relations with the United States, the sales of our securities abroad to pay for the excess of our imports and the danger of mortgaging the future of our country, and has given frequent warnings as to the character of many of our imports.

OUR EXPORTS

The excess of our exports over imports for the year ending 31st March was $343,491,000, as compared with $623,647,000 for the previous year. Although so much smaller than for 1918, the excess was larger than in any previous year. The difference of $280,156,000 is more than accounted for by a falling off of $320,874,000 in our exports to Great Britain, and this again is due to a decrease of $297,893,000 in exports of agricultural products and of $87,318,000 in manufactured articles. For the six months ending in September the exports for the two half years are almost equal, while the imports were $33,571,000 less. It is gratifying to notice that, apart from the decrease in agricultural production, our figures have not been much altered by the cessation of the manufacture of munitions. Food is in greater demand than ever and our factories are behind in the production of almost every line of manufacture, while nearly every form of raw material is difficult to obtain. Our total foreign trade for the fiscal year was $2,176,378,000, as compared with $2,548,691,000 in 1918.

It is clear that, if our foreign trade were on a cash basis, we could pay the interest on our foreign debt and settle for our excess purchases from the United States without difficulty, but Europe cannot pay just now, and we must therefore limit our purchases from the United States wherever that is possible. Doubtless the markets for our securities in the United States will gradually widen, and it will become easier to adjust our accounts, but this will be a poor remedy. We cannot afford to increase our debts to foreign investors in view of the taxation we shall have to bear.

CURTAIL IMPORTS

Let us consider a few items in our imports which at least suggest great possibilities of curtailment, if we are prepared to restrict our pleasures for the common good. Under the head of apparel, we bought abroad to the extent of $8,500,000, including headgear alone for over $5,000,000; under fancy goods, $4,000,000; fruits and nuts, $25,000,000; furs, $4,500,000; gramaphones, over $2,000,000; silk in various forms, $21,000,000; tobacco, nearly $12,000,000; in all, $77,000,000, mostly luxuries. Then we are yearly face to face with enormous imports of material, part of our requirements of which we already produce, or which it would be natural for us to produce. It is obvious that our national finances would benefit if we could either produce the following items ourselves, or avoid in any way their importation: Bricks, clays and tiles, over $4,000,000; coal, coke and charcoal, $79,000,000; breadstuffs, $26,000,000; all foodstuffs, $121,000,000—much of this is doubtless absolutely necessary, but surely there is room for a large reduction; iron and steel in all forms, $161,000,000, including machinery, $45,000,000; textiles in all forms, $168,000,000; motors, railway cars and other vehicles, $18,000,000. We have repeatedly drawn attention to items of this character in past years, but we fear, without much effect. At present, however, the people of Canada are feeling rather keenly the result of their indifference to their own affairs, and it seems worth while to press these facts once more on their attention.

IMPORTS FROM UNITED STATES

There is one comforting feature about our trade with the United States. While in 1913 we bought $2.70, last year we bought only about $1.50 of goods for every dollar's worth bought by the United States from Canada. While our purchases have increased in value by 65 per cent., theirs have increased by 180 per cent. Comparing the totals, the imports for 1919 are less by $46,000,000 than in 1918, but as in the item referred to in past years, military stores, there is a decline of $80,000,000, and another decline of $17,000,000 in pork, both due to the cessation of the war, the imports for ordinary purposes are much larger than ever before. The most notable increases are in traction engines, mainly for farming, about $10,000,000, and in raw cotton, about $13,000,000.

REDUCED WHEAT EXPORT

There are many handsome increases in exports to counterbalance increased imports, but the outstanding feature is the enormous decrease of $295,000,000 in the value of exports of grain, of which $270,000,000 is due to a decrease in exports of wheat. There is a reduction in quantity of 150,000,000 bushels, from 215,000,000 bushels of all grains in 1918, to about 65,000,000 bushels in the year ending March, 1919. In the item, "cartridges—gun, rifle and pistol"—which has figured so largely in our exports during the war, there is a decline of $139,098,000. There is also a decline of $12,000,000 in exports of flax seed. Against the decline in imports of pork there is a corresponding one in exports of bacon, but there is an increase of about $28,000,000 in exports of meats and butter. There is an increase of $14,000,000 in the item of ships sold to other countries. In our imports the totals of increases and decreases are not very far apart, but in exports we have the extraordinary condition of increases amounting to $110,000,000 and decreases amounting to $443,000,000. Had we been as fortunate in the quantity of merchandise we had to export in the fiscal year ending March, 1919, as we were in the previous year, our financial position would have been very different.

FIELD CROPS

The preliminary estimate of the value of our field crops for the year 1919 is $1,452,787,000, as compared with $1,367,909,000 in 1918, the actual figures for which fell slightly short of the estimate. There was a decline in the value of grain crops, but a large increase in fodder crops and potatoes. Except in swine there is a slight increase in the numbers of all live stock on our farms. It is difficult as yet to obtain accurate figures as to the production of our mines for the year just closed. We estimated that of 1918 at $220,000,000, and the actual figures were $211,301,000. For 1919 the best estimate we can obtain is $167,000,000, showing a falling off of nearly $45,000,000, which is almost entirely in metals. Because of the ending of the war we produced only about half the quantity of nickel produced in 1918; about the same quantity of lead and zinc, at lower prices; less copper, also at lower prices; and less silver, but at higher prices.

CANADA'S DEBT

The statement of the public debt of the Dominion of Canada at the end of November shows a net total of $1,817,839,000, and we are informed that at the end of the fiscal year, March 31st, it will be $1,950,000,000. The estimated net amount due by Great Britain to the Dominion at the end of November is $181,000,000. There is also due by the governments of four other countries about $20,000,000. These assets are taken into account in stating our net debt. In addition to the debt due by Great Britain to the Government of Canada, there is a debt of $200,000,000 due by Great Britain to the Canadian banks, on which, however, since the close of the year partial payments have been made. The war expenditure of our government has fallen from a million dollars daily to half a million, but we are still far from normal in this respect. The expenditure for pensions has now reached $3,000,000 monthly.

CANADIAN SECURITIES

The sales of Canadian securities for 1919 are much larger than in 1918, and there is an important difference in their distribution.

Security	Total Sold	In Canada	In United States	In Great Britain
Government ..	$781,812,000	$629,562,000	$152,250,000	.....
Municipal	27,166,393	18,333,893	8,832,500	.....
Railway	35,355,133	5,700,000	24,550,000	$5,105,133
Public Service Corporation ..	20,950,000	11,100,000	9,850,000	.....
Miscellaneous ..	44,100,202	34,595,202	9,505,000	.....
Total 1919	$909,383,728	$699,291,095	$204,987,500	$5,105,133
	100%	76.89%	22.54%	.57%

There is an increase of about $145,000,000 in the total, but the increase in the amount sold in the United States is over $170,000,000. Had it not been for these sales the difficulties in connection with New York exchange would have been much greater.

THE PROCESS OF ADJUSTMENT

The difficulties of reconstruction after the great war are even greater than we feared. The whole world is feeling the effect of four years in which the ordinary work and economics of life were not merely neglected, but the basis thereof was almost swept away. We are short of almost every commodity, the strongest evidence of this being the fact that millions of people in Europe face actual starvation. We cannot re-establish the normal supply of commodities except by working harder than usual, and we cannot lessen the terrible strain of high prices without doing the extra work which will put an end to the lack of commodities. We cannot adjust prices without also bringing about a contraction in the volume of paper money and other instruments of credit, and so far as it is possible to enforce contraction without interfering with the production of what is really necessary, the reduction of prices will be facilitated. In a word, bankers should not aid speculation, or assist ventures which do not directly lead to production. We are still building ships with feverish haste throughout the world, and we ought to be spending large sums on railroads in order that commodities may be freely distributed. The present cost of ocean transportation, quite as much as the cost of goods at the primary markets, stands like a huge barrier across the pathway of return to normal conditions. What is worse, however, is that even present prices, in the natural order of things, will go on rising until the lack in the world's supply of commodities has been filled, and there has been a large contraction in the volume of paper money now in existence.

WAGES AND PRICES

In the case of many classes of wage earners there has been an adjustment of pay against this increased cost of living, but there are many instances in which there has been either no adjustment or one quite inadequate. There are, however, some classes of earners who are so highly paid, in comparison with the past, that they have unusual spending power, and, along with all the others who have profited unduly by the war, they are spending their money in such a manner as to increase still further the troubles of the less well-off. Apart from this, after the gigantic struggle of the war, the world has slackened its energies and is filled with argument and unrest. All these elements move along an ascending spiral which clearly ends in ruin if we cannot arrest their course.

Prices will be higher than before the war for many years to come, but a readjustment to tolerable conditions is absolutely necessary if we are to enjoy the peace bought at such a cost. Governments must cease borrowing and keep their expenditures within their powers of taxation; both individuals and governments must spend less on things not absolutely necessary, and we must all work harder to produce the normal supply of all the commodities useful in life.

CO-OPERATION ESSENTIAL

Canada, as I have already said, won its high place in the world's regard by superb co-operation in the one ideal of winning the war. Can we not compromise for the moment the differences between capital and labor, between farmer and manufacturer, between the various interests that are risking our future for the sale of their own particular grievances, and co-operate in another ideal equally great, the restoration of peace and the return of prosperity on a better foundation? With this accomplished the separate ideals of the industrial divisions of our society can be discussed with far more chance of fair adjustment than is possible in these difficult times.

MUST INCREASE EXPORTS

We know now roughly the cost of the war as represented by our public debt. This debt is held mostly at home, but partly abroad. In addition, there were issues of securities made before and during the war by governments, municipalities and private companies, and sold abroad. On the whole of this debt, so held abroad, the annual charge is about $190,000,000 per annum. Of this roughly about $65,000,000 is due to holders of our securities in the United States, and about $125,000,000 to holders in Great Britain and Europe. This debt we can pay only by an excess of exports over imports or by new borrowings. The debt at home is our own domestic affair. Certain citizens have advanced the cost of the war to the nation, and we now have to distribute this cost by taxation over all the citizens of Canada (except those who escape taxation), so as to meet the annual amortization payments. If the annual payments are obtained by reasonably fair taxation, so levied that the taxes do not become a cause of restraining our industries, we shall not fail to win through, but to accomplish this, much study of the subject is necessary.

TAXATION

Many forms of taxation not yet in use in Canada will doubtless be employed, in addition to those now in force, but the whole question should be approached without that class feeling which often causes taxes to be so apportioned, that bitterness and a sense of injustice are felt by many who do not object to being heavily taxed so long as those who really can afford to pay their share do not escape. The income tax should be paid by a much larger number of citizens. The tax on surplus profits needs much study: there is all the difference in the world, both in justice and in the interest of the community, between a large aggregate of profit made by a small margin on each transaction and a similar sum made by an unfairly large margin of profit on each transaction. The community may be deeply interested for its own advantage in securing the extension of the first kind of transaction, while no one is interested in the success of the other class except the taxpayer himself. The tax in the end must be borne by our industrial activities, and we are foolish if, in our eagerness to escape our own share, we make such burdens so heavy on others that many of these activities must cease, and commodities that under fair conditions might be produced at home are replaced by imports from abroad.

UNION BANK OF CANADA

55th Annual Statement — 29th November, 1919

Fifty-fifth Statement to the Shareholders Discloses Continued Growth of Influential Canadian Banking Institution—Total Assets Built Up to $175,000,000 and $2,000,000 Added to Reserve Fund—Significant Extension of Connections in Canada and Abroad, Aimed to Assist in the Financing of Canada's Foreign Trade—Bank in Strongest Position it Has Ever Held—1425 New Shareholders.

The Fifty-fifth Annual Meeting of the Shareholders of the Union Bank of Canada was held at the Head Office of the Bank, in the City of Winnipeg, at twelve noon, on Wednesday, January 7, 1920.

The President, Mr. JOHN GALT, in the chair.

DIRECTORS' REPORT

The Directors have pleasure in presenting their report, showing the result of the business of the Bank for the year ended November 30th, 1919.

During the year 89 branches and agencies were opened as follows:—

In the Province of Prince Edward Island, 1—Charlottetown.

In the Province of Nova Scotia, 3—Berwick, Kentville and Truro.

In the Province of New Brunswick, 2—Moncton and Sussex.

In the Province of Quebec, 1—Kenogami.

In the Province of Ontario, 13—Blenheim, Burritt's Rapids, Caledon, Campbellford, Charlton, Easton's Corners, Indian River, Ridgetown, Rodney, Toledo, Toronto (Woodbine and Gerrard, Warsaw and Woodlawn).

In the Province of Manitoba, 28—Altamont, Augusville, Clanwilliam, Clearwater, Deepdale, Dropmore, Elm Creek, Elphinstone, Graysville, Homewood, Lowe Farm, Margaret, Morris, McAuley, Oakburn, Rosebank, Roseisle, Sandy Landy, Sanford, Solsgirth, Sperling, Winkler, Winnipeg (Corydon and Lilac) Ellice Ave., Main and Lansdowne, Main and Mountain, Union Stock Yards and West Kildonan).

In the Province of Saskatchewan, 22—Alida, Carruthers, Coleville, Dewar Lake, Drake, Eaton, Govan, Guernsey, Jansen, Keystown, Kyleville, Limerick, La Porte, Major, Mantario, McNutt, Netherville, Palmer, Ruthilda, Salvador, Stewart, Strongfield.

In the Province of Alberta, 17—Acadia Valley, Alcomdale, Bentley, Black Diamond, Hillhurst, Calgary, Chauvin, Clive, Duchess, Leduc, Loyalist, Lundbreck, North Edmonton, Rimbey, Sedalia, Sexsmith, Sunnynook and Waterhole.

In the Province of British Columbia, 2—Vancouver (City Heights and Ducks).

The number of branches and agencies in operation on November 30th, 1919, was 388.

The usual inspection of all branches and agencies has been made.

During the year Advisory Committees were appointed at Vancouver, B.C., Montreal, Que., and London, Eng.

JOHN GALT,
President.

PROFIT AND LOSS ACCOUNT

Balance at credit of account, 30th November, 1918		$126,298.90
Net profits for the year, after deducting expenses of management, interest due depositors, reserving for interest and exchange, and making provision for bad and doubtful debts and for rebate on bills under discount, have amounted to		932,256.80
Premium on new stock		1,781,170.00
		$2,839,725.70
Which has been applied as follows:—		
Dividend No. 128, 2½ per cent., paid 1st March, 1919		$125,617.45
Dividend No. 129, 2½ per cent., paid 2nd June, 1919		132,770.03
Dividend No. 130, 2½ per cent., paid 2nd September, 1919		142,143.62
Dividend No. 131, 2½ per cent., payable 1st December, 1919		167,799.32
Transferred to Rest Account		2,000,000.00
From Premium on new stock..	$1,781,170.00	
From Current Profits.....	218,830.00	
Contribution to Officers' Pension Fund		10,000.00
Contribution to General Hospital, Winnipeg		5,000.00
War Tax on Bank Note Circulation to 29th November, 1919		58,172.41
Balance of Profits carried forward		198,222.87
		$2,839,725.70

General Statement of Liabilities and Assets as on 29th November, 1919

ASSETS

Gold and Silver Coin.....	$953,902.93	
Dominion Government Notes.	13,724,823.00	
		$14,678,725.93
Deposit with the Minister of Finance for the purposes of the Circulation Fund		260,000.00
Deposit in the Central Gold Reserves		5,500,000.00
Notes of other Banks		1,576,481.00
Cheques on other Banks		7,509,201.41
Balances due by other Banks in Canada		102,287.30
Balances due by Banks and Banking Correspondents elsewhere than in Canada		3,569,800.66
Dominion and Provincial Government Securities not exceeding market value		13,048,913.69
Canadian Municipal Securities, and British, Foreign and Colonial Public Securities other than Canadian		15,818,016.79
Railway and other Bonds, Debentures and Stocks, not exceeding market value		2,602,740.30
Call and Short (not exceeding 30 days) Loans in Canada, on Bonds, Debentures and Stocks		3,439,410.79
Call and Short (not exceeding 30 days) Loans elsewhere than in Canada		7,956,854.74
		$76,062,432.61
Other Current Loans and Discounts in Canada (less rebate of interest)		86,529,156.17
Other Current Loans and Discounts elsewhere than in Canada (less rebate of interest)		3,672,372.29
Real Estate other than Bank Premises....		268,476.29
Mortgages on Real Estate sold by the Bank		150,645.10
Overdue Debts, estimated loss provided for..		248,532.51
Bank Premises, at not more than cost, less amounts written off		532,740.61
Liabilities of customers under Letters of Credit, as per contra		7,186,940.91
Other Assets not included in the foregoing.		337,760.98
		$174,989,057.47

LIABILITIES

Capital Stock		$7,968,150.00
Rest Account	$5,600,000.00	
Balance of Profit and Loss Account carried forward	198,222.87	
	$5,798,222.87	
Unclaimed Dividends	10,951.73	
Dividend No. 131, payable 1st December, 1919	167,799.32	
		5,976,973.92
		$13,945,123.92
Notes of the Bank in circulation	$12,508,819.00	
Deposits not bearing interest..	51,119,804.54	
Deposits bearing interest.....	84,376,709.79	
Balances due to other Banks in Canada	572,355.79	
Balances due to Banks and Banking Correspondents elsewhere than in Canada	5,058,941.92	
		153,636,631.04
Acceptances under Letters of Credit		7,186,940.91
Liabilities not included in the foregoing		220,361.60
		$174,989,057.47

Continued Next Page.

UNION BANK OF CANADA—*Continued*

Report of the Auditors to the Shareholders of the Union Bank of Canada.

In accordance with the provisions of subsections 19 and 20 of Section 56 of the Bank Act, we report to the Shareholders as follows:

We have audited the above Balance Sheet with the books and vouchers at Head Office and with certified returns from the Branches.

We have obtained all the information and explanations that we have required, and are of the opinion that the transactions of the Bank which have come under our notice have been within the powers of the Bank.

In addition to our verification, at the 29th November, we have, during the year, checked the cash and verified the securities representing the investments of the Bank at its chief office and principal branches and found them to be in agreement with the entries in the books of the Bank relating thereto.

In our opinion, the Balance Sheet is properly drawn up so as to exhibit a true and correct view of the state of the affairs of the Bank, according to the best of our information and the explanations given to us, and as shown by the books of the Bank.

T. HARRY WEBB, E. S. READ,
Auditors of the firm of
GEORGE A. TOUCHE & CO.,
with which is amalgamated
WEBB, READ & CO.

Winnipeg, 20th December, 1919.

H. B. SHAW, General Manager.

JOHN GALT, President.

Customs Rulings

(*Continued from page* 231)

son-Paterson Company's prosperity soda, and similar combinations of soda ash and bicarbonate of soda.

Declared that Dexter and Cross continuous feeders, per illustrations submitted, when attached to, or together with, presses with which they operate, or when impored separately, are dutiable under tariff item 453.

Wrappers of an advertising character designed to be pasted on cans or other containers, ruled by the Board of Customs on 9th October, 1917, to be dutiable under tariff item 178.

Ship's port lights are now manufactured in Canada and therefore not entitled to entry under tariff item 470.

Pulley blocks of wood or iron, single, double, triple and quadruple, up to 18 inches in diameter are now manufactured in Canada and therefore not entitled to entry under tariff item 470.

Continuous feeders for printing presses, ruling machines or folding machine, whether imported separately or with the machine with which they operate, are dutiable under tariff item 453.

Vacuum system for stripping cards,—ruled to be dutiable under item 453.

Gramophones for educational purposes, not admitted under item 696.

Australian Import Restrictions

Proclamation Issued Prohibiting Importation of Certain Specified Commodities

The High Commissioner for Australia, London, has reveived advice from the Prime Minister to the effect that a proclamation, dated 1st November, 1919, has been issued prohibiting the importation of the undermentioned goods except by license. The conditions upon which the Minister for Trade and Customs will issue a license will be published later.

Absolute alcohol.
Amylic alcohol.
Collodion.
Sulphuric ether.
Anæsthetic ethers.
Ethyl acetate.
Cocoa and chocolate, potable.
Rennet.
Muntz or yellow metal, nickel, silver, German silver and Britannia metal sheets.
Bronze and gunmetal bars, rods and ingots.
Gilding metal sheets.
Antimony, star antimonial and lead compounds, viz., type and linotype metal, antifriction and plastic metals.
Brass, viz., angles and tees, bars and rods, pipes and tubes, plate sheet and strip.
Copper, viz., angles and tees, bars and rods, pipes and tubes, plate sheet and strip wire.
Phosphor copper—bars, rods and ingots.
Zinc and spelter—bar and ingot.
Railway and tramway materials, viz., rails, fishplates and fishbolts, tie plates and rods, switches, points, crossings and intersections.
Beams, channels, girders, and joists, rolled iron or steel.
Manganese or chrome steel parts for grinding, crushing or pulverising machinery.
Accumulators or storage batteries.
Wire, electrical cotton-covered.
Tubes, collapsible.
Iron and steel—pig iron, ingots, blooms, billets, bar, rod, angle, tee, high-speed tool steel bars, rods and ingots.
Oils, coal-tar, viz., benzol, naphtha (solvent), naphtha (heavy).
Paints and colors, viz.:
Dry white lead.
Paint ground in liquid in packages weighing over 14 lb.
Plaster of Paris.
Carbolic acids.
Cresylic acid.
Crude creosote and crude tar oils.
Naphthaline, crude.
Naphthaline, N.E.I.
Arsenate of calcium.
Arsenate of lead.
Arsenate of soda.
Arsenate of zinc.
Carbolic disinfectants.
Sodium hyposulphite.
Arsenic.
Arsenate of soda.
Arsenic sulphide.
Ethyl chloride.
Sodium sulphate (glaubers salts).
Bacteriological products and sera.
Veneers, three-ply.
Strawboard.
Frames for side cars in sets.
Wheels, steel and steel rimmed (including tyres), for use on railways and tramways.
Axles and other parts for such wheels.
Panels and mudguards for motor cars.
Hosiery yarns.

The British Board of Trade understand from a cable they have received from their Senior Trade Commissioner in Australia that goods in the course of shipment or on *bona fide* order, except those previously specially prohibited, will not be refused entry.

New Merchants Director

Western Business Man Identified with Grain Trade Elected to Board of Directors

At the Merchants' Bank directors' meeting, held on the 28th November, E. W. Kneeland, of Winnipeg, was elected to a place upon the Board. The appointment of a Western man whose interests are entirely centred in the wheat business is an indication of the growing importance of the West in the minds of the powers that be in our eastern banks. Mr. Kneeland, who is a naturalized Canadian subject, having been born in the United States of Canadian parentage some fifty years ago, has devoted his whole life to the development of the grain business in the United States and Canada. He is now general manager of the British American Elevator Company; vice-president, Port Arthur Elevator Company; vice-president, Saskatchewan Elevator Company and Liberty Grain Company. He is a director of the National Elevator Exchange, Traders Building Association, Canadian Bond & Mortgage Company, all of Winnipeg, and he is, of course, a member of the Winnipeg Grain Exchange.

Review of Industrial Conditions

Continued from page 218

CONDITIONS IN THE OIL INDUSTRY

By S. R. Parsons

President, The British American Oil Co., Limited, Toronto

We have experienced less difficulty during the past year in obtaining help than for two or three years previous. Our older employees have continued their loyal activities and the newer ones, except here and there, have not given us unusual trouble.

There has been more or less shortage of raw materials, causing some delays, but generally speaking we have been rather fortunate and do not look forward to any difficulty in our operations on account of materials.

On the whole, general operating conditions have been pretty satisfactory. So far a scheme of co-operation, which we put into effect about a year ago, with joint committee control of certain operating conditions, has proved of great service.

The demand has been very satisfactory throughout the year. Values have not changed to any great extent. On account of the fact that our raw materials are imported, we do not have as good an opportunity of exporting our products as United States refiners, except here and there for surplus lines.

If the labor situation, generally speaking, is not influenced largely by the cry for shorter hours irrespective of production, we believe we see in prospect a reasonable good year. If unfortunate labor troubles arise elsewhere or in our own country, reducing production and making it more difficult to obtain raw materials or finished products, it will interfere with the otherwise generally good outlook.

We anticipate adding to our refinery facilities, giving us a larger output for use in the home field. Before the end of 1919 we hope to have a capacity of from twenty-five to thirty-three and one-third per cent. greater than that at present. In our case this does not mean the introduction of new lines. We are also adding materially to our branches.

BIG EXPANSION BEING ARRANGED FOR

By R. H. Coombs

General Manager, Prest-o-Lite Co. of Canada, Limited

We have had very little trouble in the past year with labor, in fact, none so far as the Prest-O-Lite Company is concerned and only a small amount of trouble with the Canadian National Carbon Company. This latter trouble was due to unrest and dissatisfaction among a lot of cheap aliens whom we had on some rather dirty processes. We have now adopted a policy to employ none but English-speaking people, either British subjects or Americans and as long as we continue to employ this class of labor we expect no labor trouble.

As to raw materials, the products of both of these companies are made from raw materials which unfortunately must be imported from the United States, our principal ingredients being desilverized electrolytic pig lead and oxides thereof, carbon flour, coke, manganese, zinc, hard rubber etc. We are not experiencing any trouble in securing these materials.

Demand is satisfactory both as to amount and kind. Values are and have been stationary for over a year. We have not tried to develop the export field owing to inability with existing facilities to properly take care of domestic trade. The outlook for the near future seems perfectly satisfactory, except that the exchange differential and the necessity for importing our raw materials from the United States is rather apt to influence an advance in our manufacturing costs and consequently in our price to our distributors. However, owing to the very small advance made in the selling price of the products of our companies in the past 3 or 4 years, we do not believe that the small advance required to cover this particular feature, will in any way influence the volume of business.

As to enlargement of our capacities and the expansion of our business, we are at the present time engaged in the erection of a large new general plant in Toronto for housing both the plants of the Canadian National Carbon Co., and the Prest-O-Lite Co. The Prest-O-Lite Co. will also erect a new manufacturing plant in Toronto vicinity in the Spring, for compressed acetylene gas—one of the products of the company, used extensively in the oxy-acetylene processes. This company will also erect a new storage battery assembly plant and warehouse at Winnipeg early in the coming Spring.

CONDITIONS IN TWINE AND ROPE INDUSTRY

By R. F. Shurly

President, Shurly & Derrett, Limited, Toronto

Our experience with labor is that it has been quite scarce and very irregular. Raw materials, since the war broke, have been very difficult for us to obtain, as previous to that time practically all the soft fibre used in this country came from Europe (Russia, Italy and India), so we had to seek a new source of supply. Present conditions are that there is very little, if any, raw material on earth, of a good quality. General operating conditions have been very difficult, but we have increased our output about one-third.

Demand at the present time is great for all kinds of twine and rope, with values abnormally high. We do not consider it at all feasible or possible to export soft fibre cordage from Canada, and in our opinion it will not be possible in the future, unless conditions are absolutely different from pre-war.

The present outlook, as far as we are concerned, is good. We are booked from two to three months ahead, but by reason of the abnormal, and somewhat ridiculous figures for raw material generally, and the consequent prices that we have to obtain, we could not say exactly what six months hence will demonstrate, should there be any lessening of demand.

We have enlarged our capacity already about one-third, and have further extensions in view, but delivery of machinery is very much delayed. We have not introduced the manufacture of any new lines; in fact, we have had to cut some of the lines we previously made.

THE BRUSH AND BROOM INDUSTRY

By John C. Boeckh

Sec.-Treas., The Boeckh Company, Limited, Toronto

During the past few years we have found it exceedingly difficult at times to procure satisfactory labor, and the applications for new help which we received were not, in many instances, very satisfactory. On the other hand, wages have considerably advanced and it is quite probable that with the present increasing costs of living, they will continue to increase proportionately.

We have not suffered to any great extent as yet through the shortage of materials, though prices have advanced from 100 to 300 per cent. on different lines, with some products

The balance of trade in merchandising



WE hear a lot these days of the so-called balance of trade; and much has been made of Canada's unfavorable position in this respect.

At present the balance of trade is against us.

Therefore we, as Canadians, will have to produce more and buy more within the borders of our country, if the balance is to be restored to anything like an equilibrium.

As with nations, so with individuals.

The manufacturer who adopts an aggressive policy of production and sales, and supports that policy with vigorous and informative advertising, will divert business to himself and create a trade balance in his favor.

By the same token the manufacturer who fails to take advantage of the opportunities which advertising presents, will lose to his advertising competitor in Canada or across the line sales which might otherwise be his.

Our business is to help the manufacturer who is out after all the trade he can legitimately get.

For him we secure dealer co-operation because we do something for the dealer. We gain for him the reader's confidence because we are straightforward with the reader. We retain his goodwill and account because dealer co-operation and reader confidence sell the goods of the manufacturer whose advertising we plan, write and place.

"It's all in the Service"

Norris-Patterson, Limited

Advertising Agency

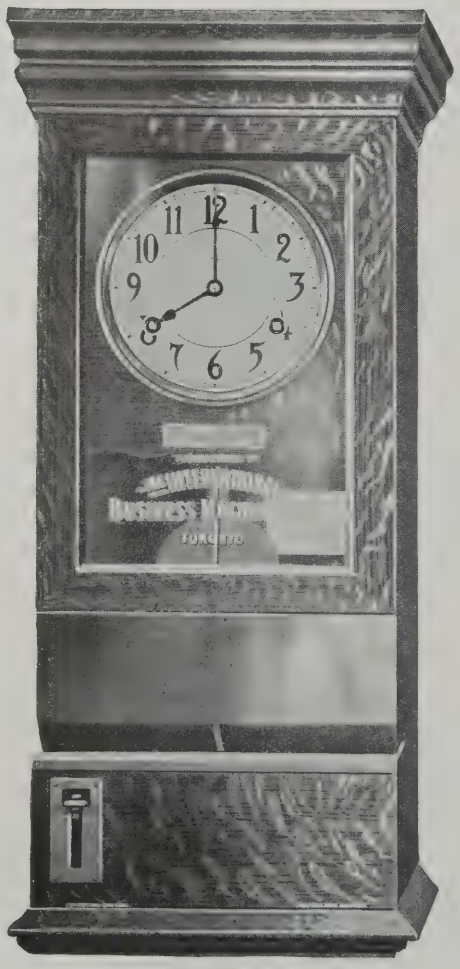
10 East Adelaide Street **Toronto, Canada**

"Pencil Records! don't go"

Make this a rule in your plant. It's a good one for any business. For the business depending on labor time records it is absolutely imperative.



International "Job" Time Recorders



International Job Time Recorder

Every job or operation calls for a "job card." The workman punches the time he starts it. He again punches the time he finishes. Both records are ***printed*** on the card by mechanism inside the machine, in absolutely accurate unchangeable figures. ***There*** you have the basis of a complete time-keeping system that will keep track of actual working time and, quite as important, give you a tracer on your "expense labor time"—the working time you are paying for but not using.

You need our Service
We can help you

Let us send you our latest folders

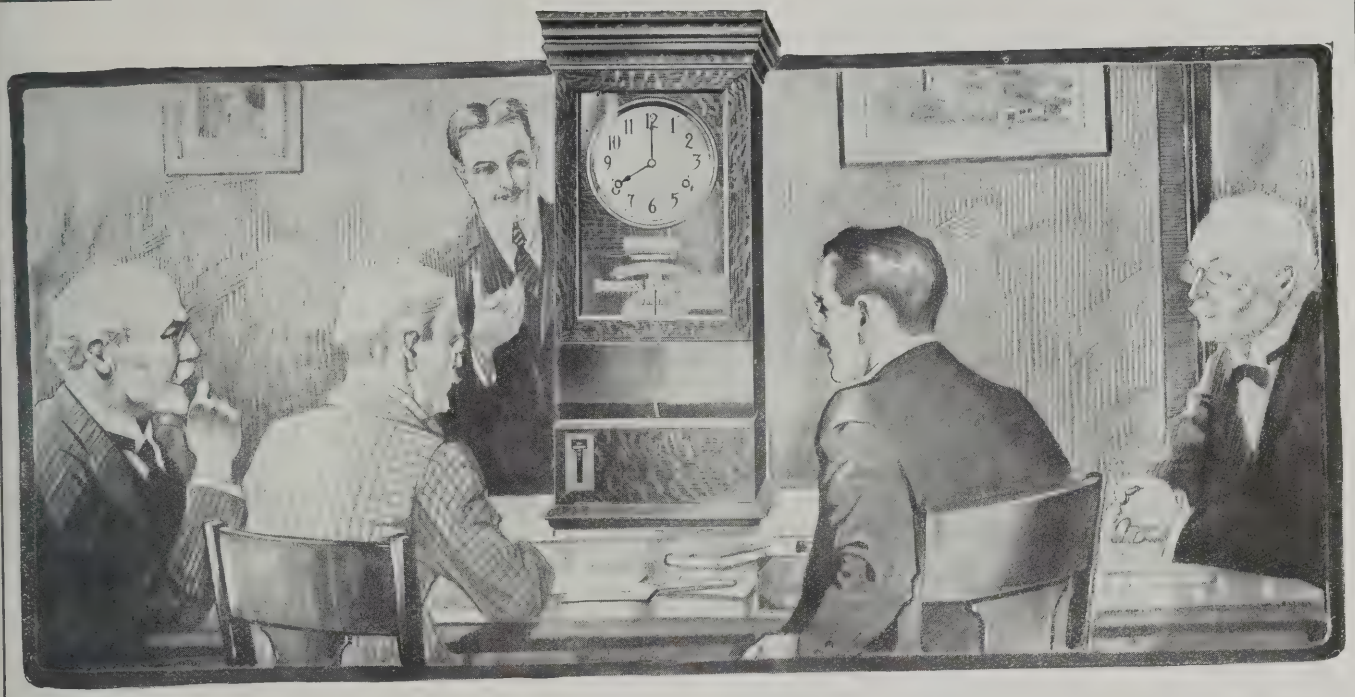
International Business Machines Company
Limited

FRANK E. MUTTON, Vice-President and General Manager

Head Office and Factory: Campbell Ave., Toronto, Ont.

Also at Montreal, Winnipeg, Vancouver

(Also makers of Hollerith Electric Tabulators and Dayton Scales)



"Here's the Time Recorder that earned our dividends for us, Gentlemen!"

"This is how it happened. Last year we put in expensive modern high-speed machines---but we also had an old-fashioned time and cost recording system. Result---our production was disappointing.

"This year my first move was to call in experts from the International Business Machines Company who investigated and showed a convincing report. In each department we now have an International Job Recorder. Each workman prints the exact starting and stopping time on every job.

"It didn't take long to pick out the producers. We've replaced the 'non-producers', those who didn't measure up, and have brought in new blood.

"Every man in the shop is a paying investment. Some are better than others. We picked 'Job Bosses' and set them on the different operations and after thorough and scientific tests we set a standard output for each machine. Now we are getting it and more because of the right spirit among the men.

"We've cut out the maddening programme of errors and disputes.

"Briefly, these are the reasons why we have earned our dividends this year."

Write Today for Our Latest Folders, Interesting and Resultful.

International Business Machines Company Limited

Time Recorder Division

FRANK E. MUTTON, Vice-President and General Manager

Head Office and Factory
Campbell Ave., Toronto, Ont.

Also at Montreal
Winnipeg, Vancouver

(Also makers of Hollerith Electric Tabulators and Dayton Computing Scales)

entirely off the market, especially those coming from such countries as Russia and France. This has in turn made a greater demand for the materials available, which has had the effect of making them at times very scarce and difficult to obtain, besides the prices in all cases advancing very rapidly. However, under these very adverse conditions, we have been able to considerably increase our output, due largely to installation of labor-saving machinery and to the loyalty of our old employees who have been with us a great number of years.

The demand at present for our manufactures is very large, and even with our increased output our capacity has been taxed to the utmost and it is quite likely that we will have to disappoint some customers later on. Selling prices have of course been advanced from time to time, and it is probable that further advances will take place in the near future.

We have also begun the manufacture of kindred lines, and while it is too early to give our forecast as to future possibilities for the sale of same, we anticipate that the demand will grow and develop to a large extent.

As to future conditions of trade generally, we would not want to express an opinion as no doubt these conditions are dependent on certain factors and their influence on the situation is difficult to define. It seems, however, to us that with the great shortage of supplies of all kinds, and the increased demands for them, that trade generally should continue good for some time to come with a period of prices at present day levels or higher, unless other circumstances, of which to-day we are not aware, enter into the situation.

REVIEW OF ELECTRO-CHEMICAL INDUSTRY

By H. W. Matheson
Vice-President, Canadian Electro Products Co., Ltd., Montreal

Our factory is located at Shawinigan Falls and we have had but very little trouble in connection with labor. The French-speaking element are not in general labor agitators, consequently at the present time labor conditions are favorable. On the other hand, our policy has always been to meet labor half way, and we increase their wages at least in proportion to the increased cost of living. At Shawinigan Falls, all the local industries work together in this respect and in many cases we have increased their wages without being asked to do so. This has had a very good effect on the labor element and creates in general good feeling.

We do not purchase very much raw materials excepting manufacturing equipment. The few raw materials we do purchase for manufacturing purposes are readily obtainable at reasonable prices. The equipment for use in manufacturing we are obliged to purchase largely in the States. This is a serious handicap when one considers the high duty, war tax, etc., together with the now heavy rate of exchange we have to pay.

No difficulties are encountered in transportation as far as Canada and the United States are concerned; but the largest portion of our output is shipped to England and the Far East, and most serious difficulties have been experienced in the past months, and are still being experienced, in securing shipping space, especially to Europe. This has been due to lack of tonnage in the first place, and secondly, to the difficulty in having our Canadian transportation companies accept our materials. These materials, which at the present time consist of acetic acid and paraldehyde principally, have not been manufactured in Canada prior to the war, and the steamship companies know very little about these materials, and consequently are adverse to accepting them when they can secure cargoes so easily. This is being overcome by a process of education of the steamship companies. The overseas freight rates to Europe are also very high, and we are at the present time paying $40.00 per ton, which is quite a serious handicap; whereas, on our business to the Far East, which is considerable, we only pay $25.00 per ton.

When war closed we did not have any great prospect of any large volume of business for some time, consequently we did not prepare for operating on a very large scale. Business, however, has picked up so rapidly that at the present time it is impossible for us to fill the orders, and we are making plans to increase our output in the very near future.

Demand for our products has increased greatly both in the United States, Europe and the Far East, with a general trend of values slightly upward. At the close of the war our product dropped almost to pre-war prices, this being largely due to the enormous stocks held in both the U.S. and England. These stocks are now being greatly reduced, and it is expected they will be entirely exhausted by the first of May next. It can be readily seen that products cannot be manufactured at pre-war prices and consequently, as already mentioned, the prices are going upwards.

The outlook for the future is fairly bright, but since, as already mentioned, the major portion of our material goes to Europe, the problem of exchange is one of the most serious features militating against the volume of business. It is difficult to increase the price in England above a certain price for our products, since the material will then probably come in from Germany; in fact, we have already encountered some competition from Germany, especially in Belgium and Holland, and it will only be a question of time until this competition is felt in England. With the mark at its normal value, I believe it would be impossible for the Germans to compete, but under present conditions it is felt that the Germans can readily compete with our products in the English market.

As already mentioned, we are enlarging our capacity considerably, possibly to the extent of 20 per cent., and in addition to this are studying at the present time the problem of manufacturing new products. It is impossible for us to mention what these are at the present time, but in general they will consist of materials which can be manufactured by the utilization of water power and which have good markets in England, and due to the absence of water power in England are uneconomical to manufacture there.

THE TIME RECORDING MACHINE INDUSTRY

By Frank E. Mutton
General Manager, International Business Machines Co., Ltd., Toronto

The manufacturing situation with us is in a good healthy condition. We had very little labor trouble even during the strike, in fact it was only like a flash in the pan; it amounted to nothing as far as our plant was concerned. We employ and have been fortunate in securing a splendid class of labor. Further, our employees are what you might class in the constant category, that is, it is seldom anyone leaves our employ, except from illness.

As to raw materials, we have had about the same difficulties as all other manufacturers. Steel has been difficult to get—that is the proper kind. Castings have been very difficult to get, and only at a very enhanced price. However, we have never been handicapped for the want of material.

Our operating conditions are very satisfactory. We increased our output for the first eleven months of 1919 approximately 50 per cent. without any increased floor space. We find the demand in an extremely healthy condition for our three products, namely, time recording devices, Dayton scales, and Hollerith tabulating machines, with the demand increasing all the time. The price of our products have trended upwards owing to the increased cost of production.

We consider that the outlook for immediate and future business for at least three to five years was never as good in the history of this company. In fact, it impresses us

Gillette

MADE IN CANADA

Safety Razor

TRADE Gillette MARK

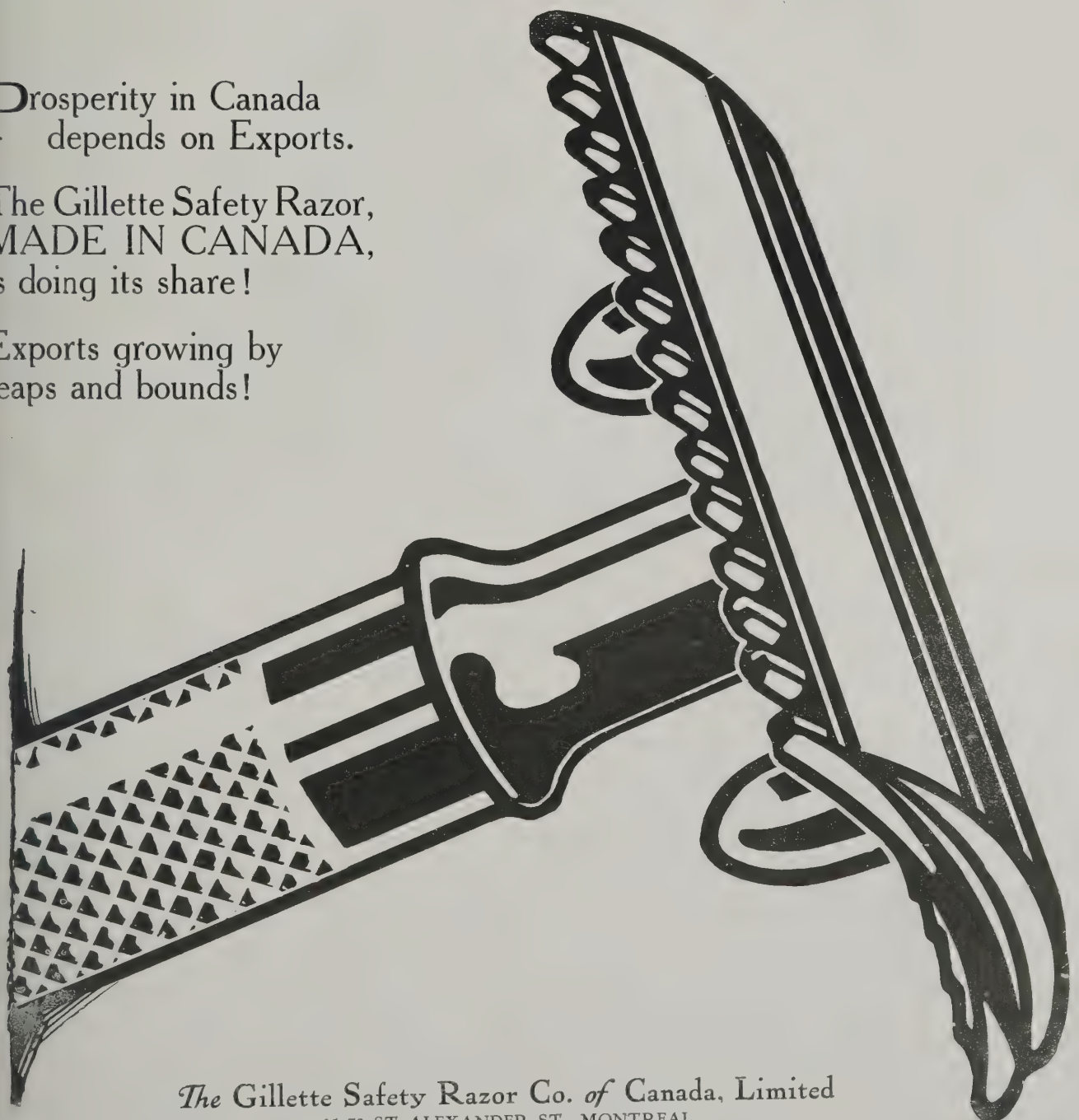
KNOWN THE WORLD OVER

THE SHAVING SERVICE FOR EVERYMAN---EVERYWHERE

Prosperity in Canada depends on Exports.

The Gillette Safety Razor, MADE IN CANADA, is doing its share!

Exports growing by leaps and bounds!



The Gillette Safety Razor Co. *of* Canada, Limited

65-73 ST. ALEXANDER ST., MONTREAL

that it is a matter of production. We can sell more than we can produce, and there is every reason in our opinion, gathered from economic conditions, that this situation will continue for the time mentioned.

We are planning to increase our manufacturing facilities and space about 50 per cent., the plans are about now completed. As to new lines, we will be placing on the market in the next two months our new electric door lock, and after careful investigation, it would clearly indicate there will be a great demand for same, and we are making preparations to take care of it.

CONDITIONS IN JEWELRY MANUFACTURE

By Geo. H. Lees

Geo H. Lees & Co., Ltd., Hamilton

We would state that the year just closing has been the most successful one in our experience. The difficulties, too, have been more than usually numerous. It has been impossible to get a sufficient supply of skilled labor, and wages during the year were considerably advanced. Raw materials were to be had, but it took somewhat longer than usual to get them, and the prices were largely advanced. Still, taking it altogether, we did very well, and have increased our output nearly to the extent of 50 per cent.

Quite a percentage of our business this year might be traced directly to the close of the war and returned soldiers, including medals, rings, and other souvenirs presented to the returning soldiers. We do not look for much business of that kind in the coming year, and yet, as business is so good along other lines, we are looking to the New Year with anticipation of a good demand for our goods.

Owing to the high price of silver, the exchange on materials, and goods imported from the United States, and the Government jewelry tax of 10 per cent., there has necessarily been forced quite an advance in prices.

We had planned at the beginning of the year to endeavor to open a line of export business, but the home trade developed so during the year that we found it impossible to satisfactorily handle it, and the export trade had to be entirely neglected.

We have not made any definite plans for enlargement of our factory, but if business continues to increase, that must necessarily be our course.

Answering your enquiry as to whether we have manufactured new lines, would say that the reverse to this has been our tendency for the last few years. Our policy has been to make as few lines as possible, feeling that we could give better results where the market offered us the opportunity of so doing, so that we make scarcely more than half of the variety of goods we did ten years ago.

GREAT DIFFICULTY IN OBTAINING MATERIALS

By L. W. Simms

President, T. S. Simms & Company, Limited, St. John

While we have of course felt it necessary to keep abreast of the steadily rising cost of living by advances in wages and while a certain amount of agitation from outside sources is constantly reaching us in the way of rumors, comparative contentment prevails, which we are seeking to foster by close co-operation in affairs concerning our plant. The supply of labor, while not acutely scarce, has at no time for the several past years been quite up to what we could have profitably absorbed.

Possibly at no period during the war have we experienced as severe difficulties in obtaining bristles, fibres and other materials of foreign origin, entering into brushes, as at the present time. Prices have advanced to a very considerable figure beyond anything prevailing during the war and the one concern on the part of the manufacturers in our industry seems to be to obtain supplies at most any figure.

We are slowly but steadily increasing our output. In this industry increase is necessarily slow in most of our departments, owing to the lack of hand labor of a fairly skilled nature, necessary to develop.

There is a very decided demand for practically all the lines that we manufacture, the orders received during a comparatively short period this fall being in excess of anything we have experienced in our history. Costs of practically everything entering into our products have continued to advance, which coupled with the increased wages, has made it necessary to put out repeated advances with others in prospect. The tremendous demand in the home market together with an increase in the demand in export markets, mostly in our case within the British Empire, has made it so far impracticable for us to seek further fields.

As far as future business is concerned, we believe there is quite a decided scarcity in the brush line especially, and the fact that increased building is imperative, and a great many properties have reached the point where they absolutely demand painting this coming spring, will cause a very decided demand for brushes, in excess of what we have experienced for several seasons.

THE ENVELOPE MANUFACTURING INDUSTRY

By C. G. Ellis

Barber-Ellis Limited, Brantford

There has been great difficulty in getting sufficient labor, and continually increasing difficulty in getting raw materials. We have no complaints to make regarding transportation, and even under the difficulty of procuring labor and material we have succeeded in increasing somewhat our production. This we deem very satisfactory as far as we are personally concerned.

The demand for the class of goods which we manufacture, viz., envelopes, is excellent; values have increased somewhat. Helping to build up export business would be very difficult on account of the seemingly increasing trouble in getting raw material; our raw material is paper.

We are enlarging our plant in Brantford, and also greatly improving our mechanical equipment, and in doing so we have felt that the outlook for trade for 1920 in the particular lines that we manufacture, is excellent, that prices will remain firm and that as very little of our particular line is imported just at present, we should be quite busy during the coming year.

DEMAND FOR FERTILIZER EXCEEDS SUPPLY

By A. E. Bonn

General Sales Manager, American Cyanamid Co.

Labor conditions in general are good. Labor has been scarce since 1916, but with us it is now reliable and effective. Raw materials secured in Canada are of good quality, but high in price. Transportation conditions, generally, are quite satisfactory, except for occasional car shortages. Our normal operating conditions are good. Since 1916, conditions have been upset and uncertain, but they are now improving.

The fertilizer and heavy chemicals market conditions are exceptionally good. The world demand for fertilizers far exceeds available supplies, and consequently the trend of values is upward. The heavy chemicals of our manufacture are enjoying good demand in Canada and the United States.

The outlook for the next three to six months is most encouraging, and if a setback develops, we do not think it will be acute before the summer of 1920. The credit situation in Canada and the United States is likely to be an industrial deterrent by the time mentioned, unless the whole banking situation and conditions affecting international exchange are improved by governmental action in the meanwhile.

REES' RoTURBo PUMPING MACHINERY

Is used the world over in Modern Industrial Plants, Power Stations, Waterworks, Mines, Pulp and Paper Mills, Salt and Chemical Plants, where highest efficiency, reliability and high-class engineering are demanded.

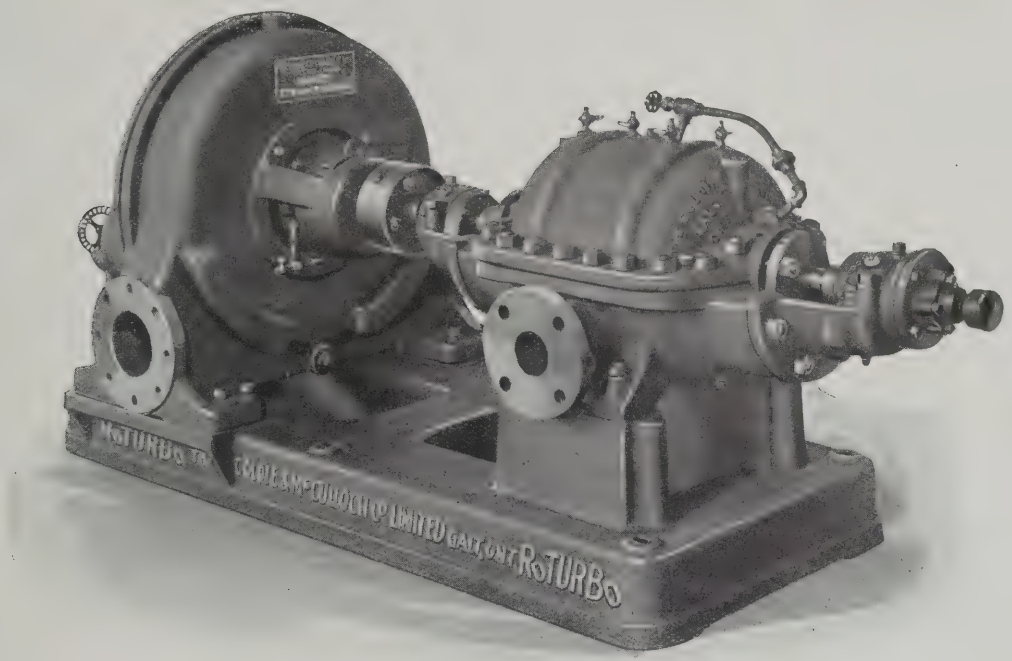


Illustration shows a REES' RoTURBo Multi-stage Pump direct connected to Goldie & McCulloch "WAIT" Steam Turbine, recently built for the Salts & Potash Co. of Canada, Limited, for pumping brine.

REES' RoTURBo Pumps provide a very high and sustained efficiency over a wide range of duties which means a saving in power costs. The self-regulating feature of RoTURBo design is responsible for this saving, and this same feature protects your prime mover from overloads on a decreased pressure head, eliminating expensive delays and costly repairs.

Catalogues and complete details mailed to those interested on request.

THE GOLDIE & McCULLOCH CO., Limited

Head Office and Works: GALT, ONTARIO, CANADA

TORONTO OFFICE: Suite 1101-2 Bank of Hamilton Bldg.

WESTERN BRANCH: 248 McDermott Ave. Winnipeg, Man.

QUEBEC AGENTS: Ross & Greig 400 St. James St., Montreal, Que.

BRITISH COLUMBIA AGENTS Robt. Hamilton & Co. Vancouver, B.C.

Steel Industry

(*Continued from page* 177)

U.S. steel strike on our market is not at all noticeable. What effect the coal strike may have it is impossible yet to determine.

We have not made any developments regarding the manufacture of new lines or extension of capacity during the war.

Our experiences in the export field have not been large, so far as steel products are concerned. During the war we sold a large number of cars, built by our subsidiary, The Eastern Car Company, for shipment to Russia and France. Had we not been able to transport these cars ourselves, the results would have been unsatisfactory. The low financial standing of European countries and the general conditions there, are so uncertain that one would be very unwise, we feel, to make any prophecies regarding the development in that direction. Even with the considerable protection which we have in Canada, we have found it somewhat difficult to compete with the American steel producers. This being the case, you can quite understand that in neutral markets this competition is that much more severe and militates against any excessive export business in steel products in normal times.

The immediate future of the Canadian steel business is dependent entirely on the immediate future of all business in Canada; our views on that point are very indefinite. After five years' war, during which very little railway equipment or steel material of any kind were brought into the country or manufactured therein except for war purposes, it would seem rational that there should be a domestic demand of very large proportions. So far, however, these expectations have not been realized, and it is only within the past few weeks that any buying movement in steel products has been evident. It will be necessary, however, that if the country is to progress, there must be a large amount of business develop to take care of the depreciation and replacements necessary during the past five or six years. In this part of the country, as you are aware, tremendous resources of raw material in the shape of iron ore and coal are available. That they will, in the not very distant future, be much more fully utilized than they are at present is, I think, something that everyone recognizes.

Stove Industry

(*Continued from page* 215)

Canada will be quite able to meet demand if the labor is available. We do not think any of the foundries are operating to their full capacity and that their operations are limited rather by number of men available than by size of buildings and equipment.

Export business has not been a factor with us. Although we know that some stoves are being exported, we do not think the quantity is of sufficient importance to affect the trade here.

PRODUCTION HAS SOMEWHAT DECREASED

By Another Manufacturer

Manufacturing conditions have been unsatisfactory as regards supply of labor and raw material. As far as we are concerned we have not been able to get sufficient output. As a consequence production has decreased in comparison with previous years, both from the fact that we are short-handed, and the output per man has been less, notwithstanding a considerable increase in wages.

Notwithstanding the increased high prices, the public seems to be buying goods of best quality. Price does not seem to limit the demand. Export business in enamelled ware is an important factor and we could have increased this business to the limit of our production. However, we felt our first duty was to the home market and have only taken such business in this direction as we could handle without prejudice to our regular trade.

The outlook as far as demand is concerned is satisfactory. The present condition as to supply of materials is so embarrassing that it is impossible to forecast what the production will be for the coming year. We have no immediate plans for factory enlargement. We first have to get up production to the capacity of our present plant before extending.

CONDITIONS HAVE BEEN SATISFACTORY

By W. J. Bathgate

Percival Plow & Stove Company, Merrickville

Conditions here as regards labor, raw material and general operations have been on the whole very satisfactory. Our production has increased about 10 per cent. The big demand has been for a medium-price range. We are not in any position to consider export trade and have had several inquiries that we could not entertain. The outlook is the most encouraging during our existence, and to meet this anticipated demand we are considering new buildings and extensions that will enlarge our plant by 20 per cent.

Agricultural Implements

(*Continued from page* 182)

facturers and producers to dispose of their output as near cost as possible for the next twelve months.

The outlook, so far as our business is concerned, depends entirely on the crops. With good crop conditions our business will be good. The tendencies of the next few months, or if not within the next few months, within a year, will be lack of work for the large number of workmen who have been induced to come to the cities from the rural districts by the large wages offered, and the only thing that will compel these men to go back to the farms will be the lack of work, and we feel that that is coming and that it is the only solution of the present situation.

If we could depend on a stable tariff policy we would expand, not only for our home trade, but to develop an export trade, but until a tariff commission is appointed or some legislation is passed that will give the manufacturers confidence in a tariff policy, we do not intend to expand in any way.

The whole matter, to our mind, is one of economics. If Canada is better off without machinery manufacturers; if the intermediate manufacturers who sell to the farm machinery manufacturers remain indifferent to the situation; if the Government does not think it needs the manufacturers in Canada to assist in paying the war debt; if the farmer considers it wise to drive the manufacturer (who has been paying the large share of the war debt, and who has financed for fifty years the Canadian north-west) into the U.S. to manufacture, and leave the burden of Canadian indebtedness to the farmer, then the Government probably is taking the right course.

PREPARING FOR PRODUCTION

By J. D. Davies

Alberta Foundry & Machine Co., Ltd., Medicine Hat

We are just starting operations in the implement business and are not yet quite familiar with conditions. In our regular business our experience of manufacturing as regards labor, raw materials and general operations has been most satisfactory. We are not pushing production now, as we are

A National Obligation

$55,000,000 went up in fire last year in the Dominion of Canada—physical loss only in the form of buildings, industrial plants, etc. The intangible loss, the value of the priceless records and documents that went up with this appalling material forfeit—records that, once gone, are gone forever—is beyond all computation.

Records are Irreplaceable

Physical property can be restored to its original condition—can even be improved upon. But the vital records—records which a business life-time has built up—records which form the foundation of your business—upon which your business is built and *grows*, cannot, in case of loss, be retrieved.

Records Worth Keeping are Worth Protecting

You put time, effort and thought into the preparation of business records—you employ a staff to keep them up—you place a high money value on them. Is it logical then, is it good business to leave them unprotected—liable to total extinction, you know not when.

A Record Safe Means Protection

What an insurance policy is to your buildings and physical property, a Record Safe is to the intangible assets of your business—your records and business documents. And it has this additional salutary feature: that though physical property may be wiped out, entirely, a Record Safe protects and guarantees the safety of those records that are always considered as constituting a "going concern."

Fire Protection an Immediate—a Vital Question

The question of protection against loss—both of your physical property and the intangible assets of your business—but the latter more importantly so—is a vital one now, when waste of any kind is a public dereliction—adequate protection is in short, nothing less than a national obligation.

Delay May Bring Serious Consequences

Consider well this question. Then take immediate steps to provide the protection that the value of your business records and documents warrants. Any "Office Specialty" representative will be glad to tell you about the new fire resisting Record Safe—explain the double wall dead-air space feature, tell you the advantages of the light but essentially solid construction—and show you how a combination of filing units to contain your various records may be stacked in "Office Specialty" Record Safes.

THE OFFICE SPECIALTY MFG. CO., LIMITED

Home Office NEWMARKET Canada

Filing Equipment Stores also at:

Montreal Ottawa Halifax Hamilton Winnipeg
Regina Edmonton Vancouver



Illustration shows "Office Specialty" fire resisting Record Safe with stack of filing sections for various kinds of records. Roller shelves at bottom accommodate account books ledgers, etc.

preparing all our new tools, preparatory to production in the summer.

The question of export has recently come up, and we have been asked to advise if we can manufacture tractors for export to Great Britain and France, but we think our proper market is Australia, leaving Great Britain and France to eastern manufacturers. We are optimistic regarding the outlook in Western Canada and are making plans to enlarge our factory next summer.

An Ontario Manufacturer.—"Since midsummer we have been quite comfortable as to labor, but the raw material situation has been getting worse and has become quite serious. Our general operations are still about normal, but this cannot continue much longer unless the raw material situation improves.

"We believe that farmers are now prepared to buy and use better grades of implements than previously. Prices are in rather a precarious position and certainly cannot go any lower. Credits and collections are good. We look for increased business. In fact, at present the only question is as to our ability to manufacture the goods for orders which could be secured. We expect the demand to exceed the supply for the coming season but after that supply would probably equal the demand."

AWAITING DEFINITE ACTION ON TARIFF

By Tractor Manufacturer

Manufacturing conditions with regard to labor have been most unsatisfactory all year on account of labor troubles. We have been more successful than some others, in as much as we have always maintained an open shop, and therefore had some employees who stuck by us and were the nucleus for a new organization. We are not really on a manufacturing programme and cannot plan on one, on account of the existing orders in council on the production of tractors, permitting them duty free under $1,400.00 in value. Our entire attention at present is devoted to jobbing work in all departments, and you will realize that this does not permit our planning for future production. In a nut-shell, our policy is that of marking time on our own lines with a fill-in policy of jobbing work, awaiting definite action as to the tariff.

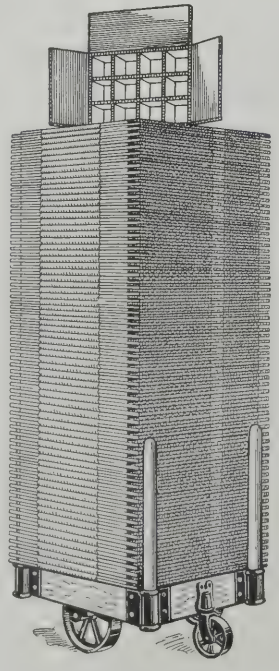
Milling Industry

(*Continued from page* 199)

jurisdiction embraces the fixing of prices for export and domestic markets. The prices fixed have not been satisfactory to the mills—being too low. The Government regulations, however, have in the main been fair. We believe the Canadian Wheat Board desire to do what is right by Canadian industries.

Production for the year 1919 will compare favorably with 1918. We believe our production will be somewhat in excess of 1918.

No one can foresee the course of prices when the world's cereal markets are decontrolled. Canada is in a favorable position to compete in the world's markets from a point of proximity to the consuming centres in Europe, and with an abundance of cheap water power available for mills. Labor will no doubt be secured at lower rates in England, the Argentine, Russia, and Germany than in Canada, United States and Australia. This fact will no doubt have some effect upon the Canadian milling industry. On the other hand we produce in Canada only, what is known as "Hard Spring



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EXPORTERS

Pulp and Paper Products, Flour, Oats and Grain, Iron and Steel, Lumber, Machinery, Sugar, Grain and Flour Bags, Fertilizers, Boots and Shoes, Textiles, Canned Goods, Cement, Carbide, Paints and Varnishes

Correspondence solicited with Canadian manufacturers interested in importing raw materials or exporting Canadian manufactures.

LONDON NEW YORK LIVERPOOL CALCUTTA
RIO DE JANEIRO LIMA TOKIO SHANGHAI SAN FRANCISCO
VALPARAISO CUBA JAMAICA BUENOS AYRES SANTOS
STOCKHOLM BARCELONA GENOA PARIS

ORDER NOW

We are convinced that there is a great future ahead of our country (Canada). We believe the Manufacturers of Canada are going to be busy.

We not only believe that Canada will hold her own, but in the march of progress will greatly increase her manufactures. Showing the confidence we have in the future, we have completed a modern three-storey structure which will greatly increase our manufacturing space.

We would ask our friends to forward all their orders for

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NUTS (every variety of finish)
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With our increased facilities we will be able to give good attention to our customers' requirements

John Morrow Screw & Nut Company, Ltd.

INGERSOLL - CANADA

Wheat," which this year is very scarce and which in the years to come will always command a market. Our only competitors for the hard varieties of wheat are the United States with only a limited area, and Russia, where conditions no doubt will remain so unsettled that for years to come they will be unable to effectively compete for export. There is an over-production of flour in Canada, Canadian mills having a total capacity to-day of approximately 25,000,000 barrels per year, 8,000,000 barrels of which only is consumed in the domestic markets.

THE WHEAT SUPPLY DIFFICULTY

By a Prominent Miller

Head of Large Canadian Milling Company

During the past year there has been no material lack of labor, except during the strike at Winnipeg. Our experience has been that common labor has not been as efficient as formerly. Mills were only partially employed because of lack of export demand during part of the time, and shortage of wheat supplies.

There were no outstanding features either in the domestic or export trade, excepting that prices and supplies were regulated through Government agencies, which, of course, was quite unusual, and which we hope may not be extended beyond the present crop year. Production for 1919 would be very much the same as that of the previous year. While there have been no new mills erected, considerable enlargement has taken place in many of the mills.

The outlook at present is, in my opinion, fair, as we look forward to a fairly steady demand for export. What is concerning eastern mills most at the present time is the possibility of getting sufficient supplies of wheat for their requirements. The Wheat Board have large commitments for wheat, and have not permitted the mills to receive shipments for some time past. A limited volume was permitted to move after Dec. 20th, but nothing like sufficient to keep the mills running full time.

The American Grain Commission have removed the embargo against the importation of Canadian wheat solely to help out their own mills, who are short of hard spring wheat; but it is hard to believe the Wheat Board will permit wheat to go to American mills when they are short for their own commitments in Europe and the Canadian mills are not fully supplied.

It is estimated now that the balance of wheat available for export would not be more than sufficient to keep mills in Canada running, providing necessary work for their employees and supplies of mill offals for our live stock and dairying interests.

BREAKFAST FOOD EXPORTS GROW

By R. K. McIntosh

The Corn Products Co., Ltd., London

We have not experienced any marked difficulty in getting sufficient help during the past two years. We do find, however, that the general efficiency of the help we are getting now is from 20 to 25 per cent. lower than that previous to the war. The supply of grain has been ample and the quality good. Of course, it must not be forgotten that we do not use any wheat, using only white corn. General operations have only been fair.

Our business has not been affected by Government regulations or restrictions during the past year. Previous to that it was very seriously restricted. Transportation and shipping conditions have been away below the average, with some exceptions. At the present time we are experiencing considerable difficulty in getting shipments cleared from the port of New York. We are badly hampered in getting G.O.C. licenses, and in getting shipments cleared; so much so, that we have almost decided to discontinue shipping to South America until such time as we can get our shipments taken from a Canadian port. We are shipping considerable to Curacao, D.W.I. At this time there is no steamship company operating between Canada and the Dutch West Indies.

We have experienced considerable increase in production, and exports to the United States and South America have increased considerably.

We anticipate a big production during the coming year. The demand from foreign markets is bound to be heavy, particularly for Canadian-made goods. Indications are that prices will not be lower on this crop. We are figuring on making some additions to increase our output on certain lines.

Automobile Industry

(*Continued from page* 184)

a great many enquiries and are hoping to be able in the very near future to establish an export business throughout the British possessions.

The outlook is very bright for the coming year, and we feel that the demand will more than likely keep up, but the tendency of prices will be considerably upward. We have considerably enlarged our capacity, and are now operating upon a basis of 1,000 motor trucks per year, which we hope will be continued during the year 1920 and, should the demand require it, we will be in a position to increase our output.

We have been striving to make or buy everything possible which goes into the manufacture of our motor trucks, in Canada, but in some instances it has been impossible to procure same in this country, as they are not being made here. I am referring principally to engines and axles.

EXPORT BUSINESS HAS BEEN RAPIDLY INCREASING

By A. Van Schlegell

Vice-President, Hupp Motor Car Corporation, Detroit

As our Canadian factory is not in operation at the present time, and probably will not be until a little later in the year, we cannot give you much information that would be of value for compiling statistics for Canada. We can, however, state that market conditions as regarding demand are unusually good. In other words, we have orders that will take our factory production for the next three months. The export business has been rapidly increasing in every part of the world. The outlook, so far as we can see, is for continued business for at least the coming year, and we hope to be able to continue the present car, although the question of price is one on which we are very much unsettled. Material and labor costs are increasing so rapidly that it is very doubtful if motor car manufacturers will be able to continue their present lines for very long.

WILL SELL ALL TRUCKS THEY CAN BUILD

By W. B. McLean

President, Mapleleaf Mfg. Co., Limited, Montreal

We have had no difficulty in regard to the supply and efficiency of labor so far, but find materials very hard to get owing to disturbed conditions at the factories and in transportation.

We are endeavoring to have all the parts possible made in Canada and have taken on an expert to develop that end of the business.

We find a demand for trucks so far greater than we can supply, and the tendency towards the lightest and heaviest models—that is, our 2 and 5-ton trucks. Price tendencies are strongly upwards owing to increased costs. We have quoted on some large orders for export, but I have not closed any of this business as yet.

The outlook to us is that we will be able to sell all the trucks we can build or obtain parts for. As we have not got

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properly going yet in this business, we have not made arrangements for any large capacity. At present we make arrangements to put out about 200 trucks per year.

Packing House Industry

(*Continued from page* 202)

curtailed shipments from this country. Since the signing of the armistice the trend of prices has been generally lower.

We do not believe there would be any marked expansion in production through enlarged capacity, as during the war there was considerable expansion in the capacity of packing houses, which are now in position to take care of present production of live stock. The production of live stock is not adequate to take care of the demand, especially on hogs. The present tendencies are not favorable for increased production of hogs with the trend of prices lower and the price of feed remaining on a high level.

The export business will continue to be a factor in our industry for some years to come, as live-stock in European countries has been depleted to a large extent and these countries are naturally dependent on North and South America. In addition to the above, there is no question but that the European exchange situation is having an influence on exports of all products from North America and no doubt if it was more nearly on a parity, increased exports would result.

GENERAL REVIEW OF PACKING HOUSE INDUSTRY

By R. D. Morrison
The Harris Abattoir Co., Limited

The packing-house industry has experienced a very high labor turn-over during the past year, but the supply of labor has been fairly plentiful throughout the year.

The report of deliveries of cattle at the five chief live stock centres in Canada, viz.—Montreal, Toronto, Winnipeg Edmonton and Calgary—shows that there has been a plentiful supply of cattle coming forward throughout the year. For eleven months ending Nov. 30, 1919, there were 1,076,48 cattle received at these markets as against 575,675 for the same period in 1918.

The hog receipts at the five principal Canadian markets for eleven months ending Nov. 30, 1919, show 1,034,177 hogs as against 1,037,555 hogs for 1918. This shows a slight decrease in receipts which would lead one to believe that there has been a correspondingly slight decrease in hog production throughout the year.

For eleven months ending Nov. 30, 1919, receipts of sheep and lambs were 612,999, as against 371,648 for the same period in 1918, or an increase of 54.9%, and readily reflects an increase in the population of sheep and lambs. This is one of the most hopeful signs in the Canadian live stock situation.

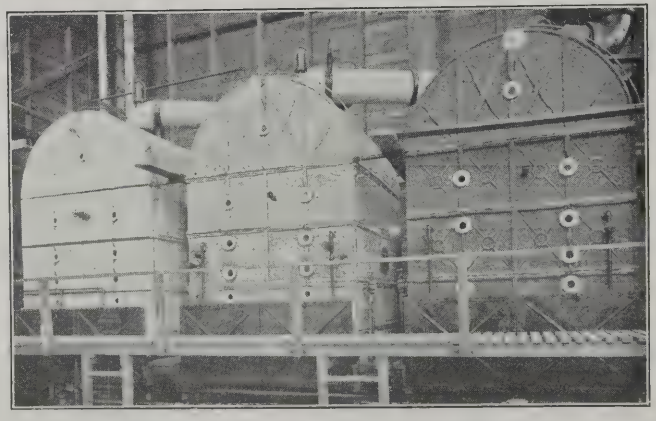
The packing house industry has been subject to greater Government regulations and restrictions than any other existing industry. In January the Canada Food Board closed its campaign for the curtailment of meat consumption in Canada. This was the immediate cause of a largely increased expansion in domestic consumption of meat. In September the Canadian Government appointed a Board of Commerce to enquire into the causes for high prices, and as a result the Board set a maximum price at which packing houses could sell Canadian pork products in Canada. This maximum price was passed on by the Board without having obtained the advice of experienced packing-house men, and in its first form was totally unfair and impossible of application.

Central European countries were, before the war, very heavy buyers of meat and meat products. During the pas

(*Continued on page* 258)

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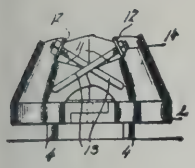
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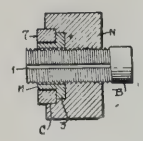
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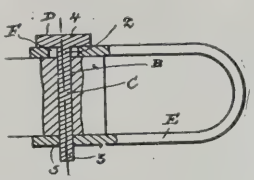
PATENTS FOR SALE



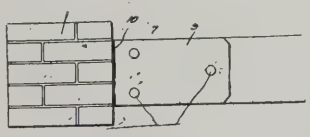
HORSE SHOE, formed of sections connected at their forward ends to provide relative movement means for fastening the shoe to the hoof, comprising of plates secured to each section in overlapping relation. Adapted to engage and conform to the sides of the hoof and having means for drawing together certain of the plates of opposite sections to bind them all to the hoof. Patent rights for sale. Christ T. Fortney, R. 1, Box 49, West Prairie, Wis., U.S.A.



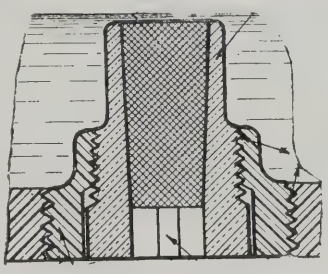
NUT LOCK, a simple and practical device, is strong, durable and absolutely reliable, one that has been thoroughly tested. It may be manufactured and placed on the market at a minimum cost with a reasonable profit. Patent rights in the Dominion for sale by T. S. Hanes, Kanauga, Ohio, U.S.A.



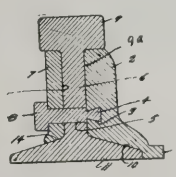
DRAFT GEAR, easily attached or detached, strong, durable and efficient in use. This simple and efficient device is one which should find a very ready market and the inventor, John Woelfle, Winterbourne, Ontario, Canada, is desirous of entering into negotiations with a reliable manufacturer with a view to arranging the manufacture, or disposal of his interests. Further particulars may be had on request.



JOIST ANCHOR.—A strong, durable and reliable anchor, easily applied, and is one which, in view of its few parts and absolute reliability, should find a ready market. The device is a time and labor saver as well as a money saver. Patent rights are for sale by C. F. Hall, Box 136, Athens, Illinois, U.S.A.



BOILER FUSIBLE PLUG, eliminates the difficulties usually found with this type of plug, can be left in the boiler for a reasonable period. The bushing once being properly fitted becomes part of the boiler and remains in the fire sheet during the life of the boiler. The thread on the plug and in the bushing are **up in the water space;** hence cannot **burn hard and tight.** Plug can be easily removed for examination and screwed back at any time with the same ease as a wash-out plug on the outside of boiler. Patent rights for sale by Wm. F. Ray, Samoa, Cal., U.S.A.



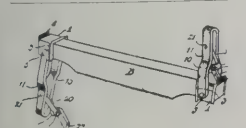
RAIL JOINT, which consists of the combination of abutting rails having a plurality of perforations in their ends, and a pair of fishplates, one of the fishplates being provided with dovetailed groove extending throughout its entire length; the other fishplate being provided with a plurality of squared perforations. Bolts each formed with a body portion square in cross section and with a wedge-shaped terminal for insertion into said perforations and said dovetailed groove. Patent rights are for sale by Ludwig Trager, 2135 South 9th Street, Lincoln, Nebraska, U.S.A.



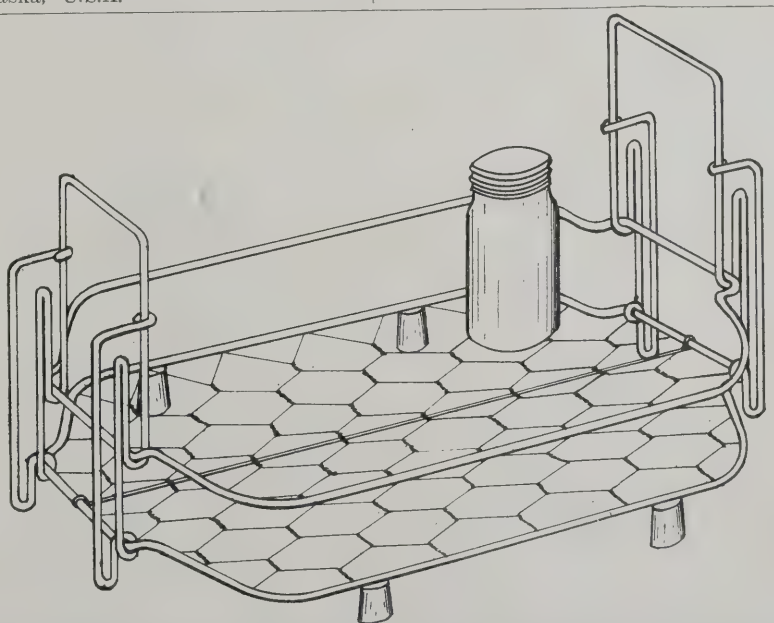
SPARK PLUG, of simple construction, and one which may be manufactured and placed on the market at a cost that will compete with any of the present devices. This device embodies all that the words Spark Plug stand for, and WILL IGNITE. No more "hit and miss." The device has been thoroughly tested and is beyond question of experiment. Patent rights are for sale by R. Champlin, 1028 Pacific Ave., Bremerton, Wash., U.S.A.



ROPE COUPLER, simple in construction, strong, durable and efficient in use, easily attached or detached. The device is one which, in view of its simplicity, convenience and cheapness to manufacture, should find a ready market. The inventor, Mr. H. A. Lowen, of Gretna, Manitoba, Canada, is desirous of arranging the manufacture of this device in the Dominion or the outright sale of his patent. Further particulars may be had upon request.



VEHICLE STANDARD, foldable and pivotally connected with the end of the bolster so that it may be folded down into the same when loading and unloading or may be stood upright and braced in upright position to carry the load. Is particularly applicable to wagons and sleds where heavy loads have to be lifted completely over the upper ends of rigid standards, for instance in loading logs, rails or the like. The device is strong and durable and well adapted to stand the strain and usage to which articles of this nature are ordinarily subjected. Patent rights for sale by L. P. Fry, Horseshoe Bend, Idaho, U.S.A.

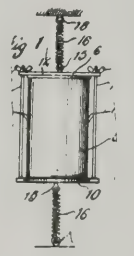


PRESERVING RACK, a very useful and simple device, so constructed that it may be folded up so as to be packed in a small compass when not in use. This simple and ingenious device is one which in view of its convenience and cheapness of manufacture would find a very ready market. This device may be manufactured at a cost so small that it could without doubt be placed in every household. Patent rights for sale by Johnson Bros., of Boissevain, Manitoba, Canada.

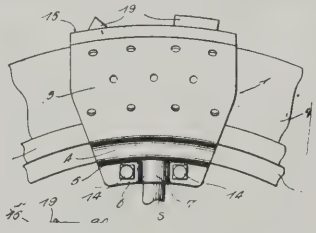
HAROLD C. SHIPMAN & CO., Patent Attorneys, Ottawa, Canada

PATENTS FOR SALE

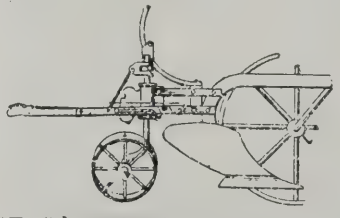
PNEUMATIC SHOCK ABSORBER AND AIR COMPRESSOR. — For use upon automobiles and other vehicles for absorbing the shocks, and also acting as an air compressor whereby air is supplied to the tank which can be used for inflating the tires; operating horn or other signal; operating a pneumatic engine and the like. This ingenious device is truly effective in use and should prove an attractive proposition to automobile manufacturers. Patent rights for sale by Mr. Wm. H. Holden, B. W. & M. Bldg., Idaho Falls, Idaho, U.S.A.



CHURN. — Resiliently supported so that it will remain in motion after it is moved manually against the tension of resilient supporting means, thus enabling the churning operation to be practised with the expenditure of minimum power and attention. The device is of special construction, is sanitary and avoids the use of absorbent material and injurious metals which may contact with the cream during the churning operation. Patent rights are for sale by Samuel H. Sandefur, 522 N. Pine St., Nomato, Oklahama, U.S.A.



TIRE ARMOUR, may be manufactured and used in connection with any tire now on the market. This device has been thoroughly tested and is beyond question superior to any of its kind. May be cheaply manufactured and placed on the market at a price well within the reach of every auto owner. The inventor is open to negotiations for the manufacture of this device or out-right disposal of his patent. Full details may be had by applying to the inventor, Mr. Gottlieb Wieland, St. Cloud, Minnesota, U.S.A.



ATTACHMENT FOR SULKY PLOWS— Does away with the necessity of lifting the plow out of the ground by hand when it encounters an obstruction and is especially convenient when moving the plow from the field to the road. The device is easily operated, remains firmly in its raised or lowered positions, the handle being foldable so as to render the plow compact for storage. Canadian patent rights for sale by Mr. John Reimers, Box 13, Millard, Nebr., U.S.A.

NUT LOCK.— An inexpensive, efficient and absolutely reliable device; may be cheaply manufactured and placed on the market at a cost which will not only compete with the present price but which will, in view of its simplicity, efficiency and durability, control the market. The inventor, Mr. George Boychuk, Box 93, P.O. Bienfait, Sask., Canada, is desirous of arranging the manufacture of this article in Canada, or is open to negotiations for an outright sale of his interest. Specifications and drawings will be supplied on request.

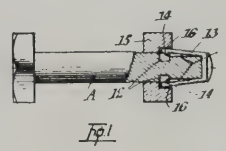
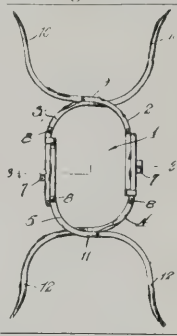
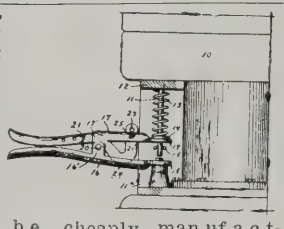


Fig 1



ANIMAL - POKE. — An inexpensive and ingenious device which is strictly humane, allowing the animal perfect freedom for grazing, but inflicting painful injury should the animal approach a fence with the object of pushing it down or jumping. The inventor, Mr. Manuel H. Teeter, McWillie, Okla., U.S.A., offers patent rights for sale.

TOOL FOR REMOVING VALVE. —Not one of the many, the one only real, efficient device for removing valves, strong, durable, simple and efficient in use, may be cheaply manufactured and placed on the market at a price that will not only compete but which will astonish. Patent rights are for sale by Mr. C. O. Throp, c.o. American Mfg. Co., Jefferson, Iowa, U.S.A.



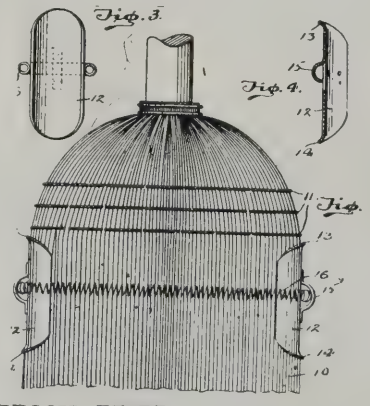
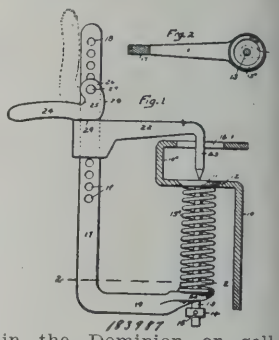
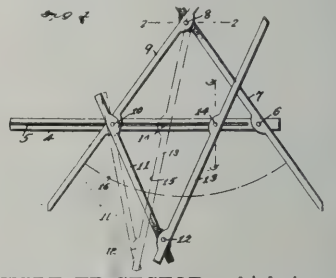


Fig. 3. Fig. 4. Fig.

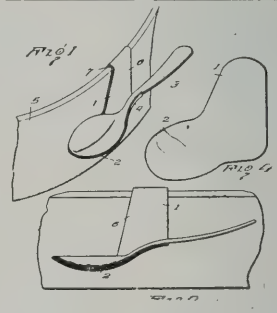
BROOM BRIDLE.—A simple, inexpensive and convenient device, which is guaranteed to double the life of any broom. The very thing for which the householder has been looking, and one which will, in view of its simplicity, efficiency and durability, find a ready market. The inventor, Mr. John E. Hewett, Wilmington, North Carolina, U.S.A., is desirous of getting in touch with a reliable manufacturer with a view to arranging the manufacture of this invention in the Dominion or negotiations for an outright sale.

VALVE REMOVING TOOL. —To manufacturers interested in a real thing, I will gladly forward full details of the most simple and efficient valve removing tool ever invented. I desire to arrange for the manufacture of this device in the Dominion or sell my patent. Would be glad to communicate with manufacturers interested in marketing such a device. For further particulars, apply to Mr. C. O. Throp, c.o. American Mfg. Co., Jefferson, Iowa, U.S.A.

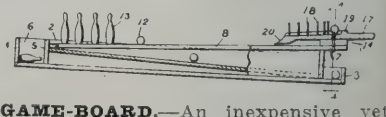




ANGLE TRISECTOR, which is, without doubt, superior to any that has yet been brought to the attention of the public, and which should control a large market. This trisector is simple, convenient, absolutely efficient and protected by broad and sound patent. Patent rights are for sale by J. Alexander Clarke, Devon, Pa., U.S.A.



KITCHEN & TABLE ARTICLES. —A simple and convenient spoon-rest, adapted to be arranged over the marginal edge of the receptacle such as a bowl, pan, etc., whereby the spoon, after being used, may be held in a convenient manner. No more 'fishing' for spoons out of scalding fluids; no more burned fingers. This device is one that will, without doubt, find a very ready and uncompeted market. Can be cheaply manufactured and placed on the market at a minimum cost with a reasonable profit. Patent rights are for sale by Mrs. Albina J. Cunningham, Bridgewater, Mass., U.S.A.

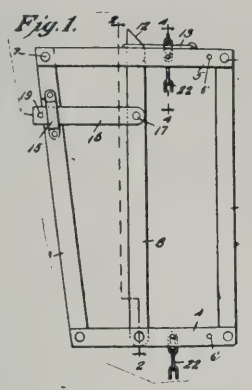


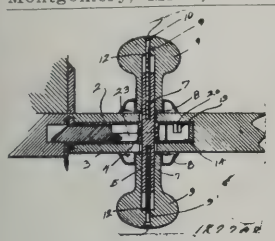
GAME-BOARD.—An inexpensive yet fascinating game. It is automatic and represents all that a game stands for; has novel feature whereby the balls used will return to the player. Patent rights are offered for sale by the inventor, Mr. Wm. Bauch, Route No. 2, Box 79, Blue Island, Ill., U.S.A.

HAROLD C. SHIPMAN & CO., Patent Attorneys, Ottawa, Canada

PATENTS FOR SALE

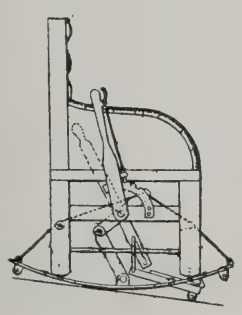
COW STANCHION. — A convenient and simple device, but one which is strong and durable, and adapted to withstand the rough usage to which articles of this kind are subject. A real comfortable stanchion which is absolutely humane, allowing the animal freedom of movement yet securely fastening and holding the head against withdrawal. The device is one which, in view of its quick, adjustment and cheapness of manufacture should find a ready market and prove an attractive proposition. Patent rights are for sale, Dan D. Schafer, Montgomery, Mich., U.S.A.

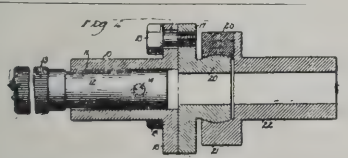




LOCK.— Having only three parts and two springs inside of the lock. Knobs fastened with counter sunk screws into the ends of the spindle. The device is one which, in view of its simplicity, cheapness of manufacture and sturdiness, should prove an attractive proposition. The patent holders, Messrs. Leusley & Eubank, Huntsville, Mo., U.S.A., offer patent rights for sale.

CONVERTIBLE ROCKING CHAIR.— Convertible into a rocking, stationary or rolling chair. Easily operated by occupant. The device offers something for which there is a ready and uncompeted market. May be cheaply manufactured and placed on the market at a reasonable profit. The inventor, Mr. Wm. Drosdowet, Box 85, Sifton, Man., offers patent rights for sale.





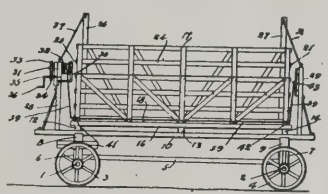
ADJUSTABLE FLOATING REAMER HOLDER.—The very thing for which the mechanical world has been looking. Having means to provide adjustments of the reamer holder which, together with the floating of the reamer, will enable accurate reaming to be obtained. Canadian patent rights are for sale by Robt. Railton, 391 High St., Valley Falls, R.I., U.S.A.



ANIMAL TRAP.—An ingenious device; may be cheaply manufactured and placed on the market at a minimum cost with a reasonable profit. The device is equipped with a storage or bait compartment having trapping devices whereby several animals can be caught at the same time. The inventor, Mr. J. F. Armand Cauvier, Grande Riviere, Gaspe County, Que., is desirous of getting in touch with a manufacturer with a view of disposing of his interests or arranging manufacture.

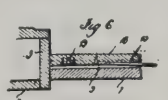
SCREW DRIVER having a special screw-holding attachment which is simple and absolutely efficient in use. The device may be manufactured separately for attachment to any type of screw driver and is something which should prove a real seller when properly introduced. The inventor, Mr. Otter A. Haufe, 240 Maple St., Secaucus, N.J., offers patent rights in the Dominion for sale.

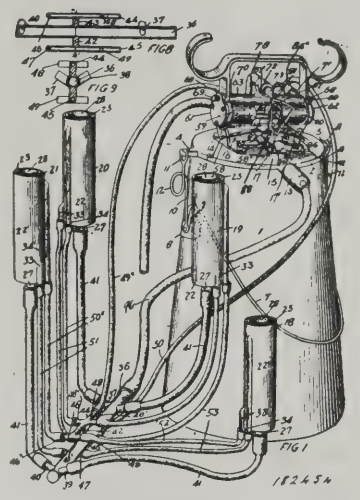




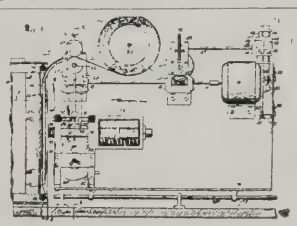
STRAW SPREADER which will increase the crop returns from $5 to $7 per acre. Really worth while machine which, in view of its simplicity, durability, and cheapness of manufacture, can be placed on every farm in Canada. The invention has been thoroughly tested and is beyond question of experiment, is especially useful in the prevention of winter killing of wheat, soil blow or washing, conserves moisture and makes tough, sticky soil much more friable. Patent rights in the Dominion are for sale by Mr. Gustav O. Sollom, Reynolds, North Dakota, U.S.A.

WEATHER STRIP. —Providing an air-tight connection between the door and the door frame, and at the same time cushioning the door frame so as to prevent the breaking of glass when the door slams. No matter how badly the door may warp or be warped, the strip will automatically adjust itself to the shape taken. May be cheaply manufactured; is easily installed, and may be sold at a tempting profit. Patent rights are for sale by Messrs. Decker & Smith, Fremont, Ohio, U.S.A.

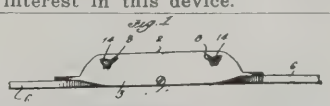




MILKING MACHINE.—An efficient and reliable machine which has no injurious effects on the animal. Is easily operated and absolutely satisfactory in use. Easily cleaned and assembled. The most satisfactory and durable device on the market. The inventor, Mr. W. J. Armes, 315 Bold St., Hamilton, Ont., is desirous of getting in touch with a reliable manufacturer with a view of disposing of his interests, or arranging manufacture of his invention.



TIMING DEVICE, having for its object the timing of intermittent operations of different kinds and means for insuring definite intervals between operations, also means for varying the duration of such intervals and for continuing the intermittent operations indefinitely, also for limiting the number of operations and for rendering the operation of the apparatus with which the invention is connected inoperative after the desired number of operations has been accomplished This device is one which is worthy of careful investigation and the inventor, Mr. W. H. Fribley, Raymond, Wash., U.S.A., is desirous of co-operating with a reliable manufacturer with a view to negotiations for manufacture or the disposal of his interest in this device.

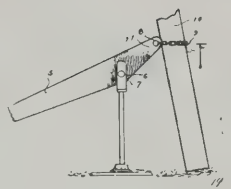


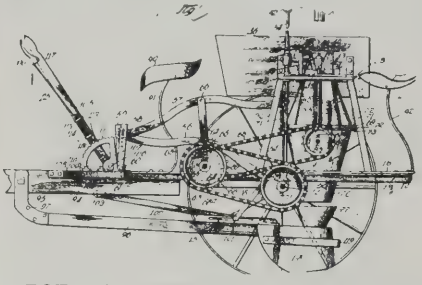
BELT FASTENING FOR MACHINERY AND THE LIKE.—A real, reliable belt fastener. The very thing for which the manufacturing world have been looking, easily attached or detached, simple and efficient. With this fastener the slack of the belt may be taken up at any time. No slipping or tearing of belts, so constructed as to be absolutely reliable, will securely hold the ends of the belt in relation to each other without reference to the strain placed thereon incident to the use upon pulley wheels. Patent rights are for sale by Mr. C. E. Queen, Rock Cave, West Virginia, U.S.A.

HAROLD C. SHIPMAN & CO., Patent Attorneys, Ottawa, Canada

PATENTS FOR SALE

FENCE POST PULLER; easily operated and will pull posts of different diameters. May be taken apart and easily packed in a small compass when not required for use. The device is one which in view of its simplicity and cheapness with which same may be manufactured, should prove a good seller. Patent rights for sale by Ole Olson, R. R. No. 3, Canby, Minn., U.S.A.





POTATO PLANTER, just what every potato grower needs. TWO MACHINES IN ONE, cuts and plants at the same time. Is the biggest time and labor saver ever put into a potato field, plants potatoes of all sizes, and furrows, cuts, covers and makes out the next row all at the same time. Potatoes can be planted just as they come from the cellar, no more sorting. This machine is, without doubt, the most efficient device that has yet been brought to the attention of the public. Patent rights for sale by J. P. Davenport, Wheaton, Ill.

MILKING MACHINE, easily operated, simple, few parts, and consequently easy to clean. Durable and efficient in use, noiseless, economical, positively sanitary, which means better milk. Has unlimited capacity and gets all the milk. Is gentle, harmless and economical. Patent rights for sale by S. B. Harner, R. R. No. 3, Box 21, Xenia, Ohio, U.S.A.

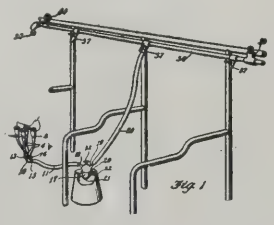
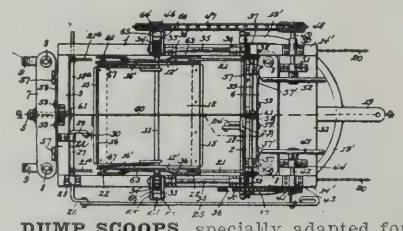
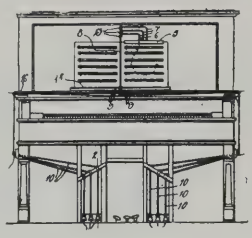


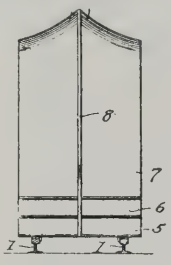
Fig. 1



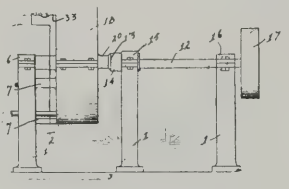
DUMP SCOOPS, specially adapted for road repairing and building, easily operated, strong and durable. One of the most efficient devices of this nature on the market. Easily operated by the ordinary farm tractor, both forward and backward, and has automatic dumping means, being operatable from the engine when the latter occupies a stationary position. Patent rights for sale by George W. Harkins, R. D. No. 1, Harveys, Pa., U.S.A.

MUSIC LEAF TURNER, easily attached to the foot pedal of any piano, so that it may be readily worked by the performer without any loss of time. May also be used by orchestras on their ordinary music stand. Simple in construction, highly ornamental, and may be cheaply manufactured and should prove an attractive proposition in view of the enormous market for such a device. Patent rights for sale by E. M. Barnes, 517 No. Water St., Wichita, Kansas, U.S.A.

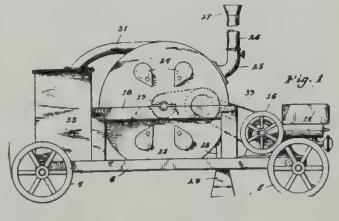




SNOW PLOW, mounted on wheels, and having parallel spaced blades carried in an inclined position, the front extremities of the blades being shorter to allow the uppermost thereof to remove a layer of snow in advance of the intermediate and lowermost blades. The rear extremities of the blades, being curved upwardly towards their relative centres into engagement with a portion of the partition which is arranged intermediate to the blades, so as to form an abutment for the snow, causing the same to be deflected outwardly. Patent rights for sale by John D. Morris, R. F. D. No. 1, Waynesboro, Va., U.S.A.

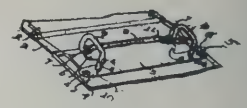


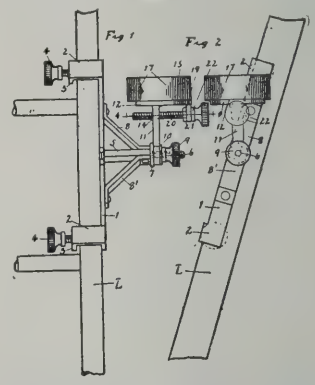
ROTARY ENGINE.—Absolutely no more waste of power, having overcome dead centre. No loss of energy, which means not only a vast increase of power but a corresponding saving of fuel over the old-style steam engine. Is simple in construction, powerful and durable. Patent rights for sale by James C. Thompson, Golconda, Ill., U.S.A.



MACHINE FOR DESTROYING INSECTS, which might also be used as a vacuum cleaner for taking up dust or the like. It is simple and efficient in use, strong, durable and so constructed that it may be easily moved from one room to another and to and from a porch or the like. The device is driven by a suitable motor. Canadian patent rights are for sale by James W. Lemon, Hardy, Ark., U.S.A.

LOOSE SHEET HOLDER.—A very simple device, easily operated and is especially adapted to school work and stenography, as it can be opened and closed quickly and stands up like an easel. The holder is also particularly useful in other office work as well as for travelling salesmen and others. Patent rights for sale by George E. Gates, Comstock, Michigan, U.S.A.

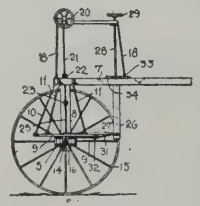




BUCKET SUPPORTING BRACKET. Holds the painter's bucket upright and close to hand on rope or ladder. Quickly adjustable to any angle. All steel, indestructible, saves time, paint and patience. The device is one which, without doubt, will find a ready market in view of its cheapness of manufacture, simplicity of construction and convenience in use. Patent rights for sale. F. D. Bouchard, Rocky Ford, Colorado, U.S.A.



SNOW PLOUGH, simple in construction, easily operated, and provided with special means for manipulations and is so constructed that the plough may move along in front of the horses or may be drawn in the ordinary manner. The inventor, A. H. Tallyn, of Benson, Illinois, U.S.A., is desirous of arranging the manufacture of his invention in Canada or sell his patent. Further particulars on request.

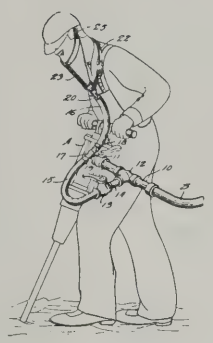


ROAD GRADER having improved steering means. The object being to provide an improved mounting of the supporting wheels and means for moving the same to various vertically inclined positions or angularly disposing the axis of rotation with respect to the line of movement of the machine, also to provide a wheel and adjusting mechanism to be employed in connection with a four or eight horse road grader whereby the draft on the animals may be greatly lessened by the proper adjustment of the wheels. Patent rights for sale by John W. Brannan, Imperial, Nebraska, U.S.A.

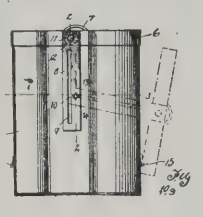
HAROLD C. SHIPMAN & CO., Patent Attorneys, Ottawa, Canada

PATENTS FOR SALE

ROCK DRILL ATTACHMENT, specially adapted for face protection during the operation of rock drilling. Device consists of conical-shaped hood of flexible material combined with an air hose for conveying air under pressure to the worker. The flexibility of the hood permitting it to conform to the configuration of and fit snugly against the face of the wearer. The inventor, Mr. Aime Blanc, Aspen, Colo., offers patent rights in the Dominion for sale.

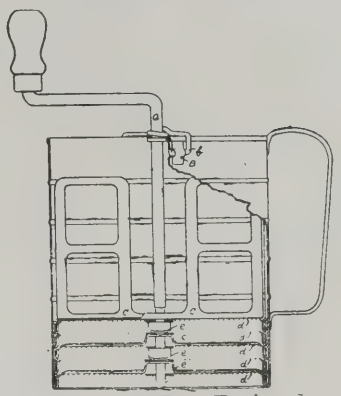


LOCK FOR RECEPTACLE LIDS, a simple and ingenious device which will securely fasten the lid of a receptacle so as to prevent the displacement of same. This device is strong, durable and efficient in use and may be manufactured for use at a very slight cost. The inventor, Mr. Albert J., Noel, Gary, Ind., U.S.A., offers patent rights in the Dominion for sale.

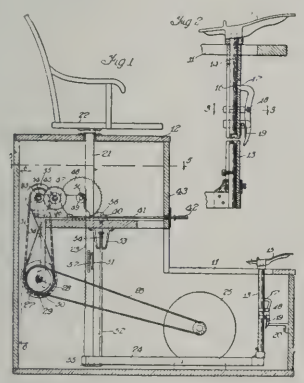




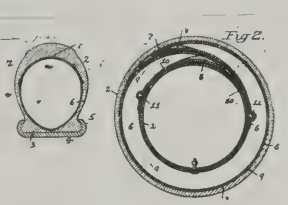
AUTOMOBILE SAFETY SIGNAL, easily adapted to any make of auto. Efficient, inexpensive and highly ornamental, avoids confusion and collisions. No diversion of the driver's attention from the machine is necessary with this signal, and consequently it eliminates the possibility of accidents. During the past year accidents due to traffic confusion were so great that it will without doubt become necessary for auto owners to adopt some signal device. Here is an opportunity for a live manufacturer, and the device is without doubt a sure thing. The inventor, Mr. D. R. Lashbrook, 119 E. Main St., Owensboro, Ky., U.S.A., is open to negotiations for the disposal of his interests or the manufacture of same on a royalty basis.



FLOUR SIFTER.—Equipped with multiple sieve, accomplishing five siftings of flour as quickly and easily as one sifting by the old method, thereby saving time as well as achieving better results. It is a well known fact that the more frequently flour is sifted the lighter and more fluffy it becomes and allows the air to become mixed, giving lightness in the process of baking, the result so much desired. The device is strong and durable; may be cheaply manufactured and placed on the market at a price which will compete with any of the present sifting devices. Patent rights are for sale by Mrs. J. E. Trice, 206 Wabash Ave., Wichita, Kansas, U.S.A.

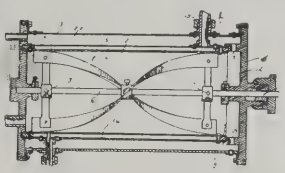


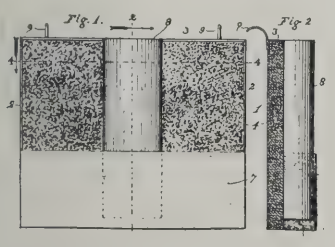
SHOE-SHINING CHAIR AND STAND which eliminates the trouble of climbing to the chair, no foot rests in the way, nothing to catch coats or dresses on when getting in and out of the chair, no danger of stepping on brushes, bottles or boxes when leaving the chair. Foot rests are comfortable and adjustable to suit the different lengths of legs. No pressure necessary to hold the foot on the rest. Canadian patent rights for sale by H. & H. Manufacturing Co., Elgin, Ill., U.S.A.



PNEUMATIC TIRE.—A real, honest to goodness puncture proof pneumatic tire. The tire that will stand up always under all conditions, roads and loads. The tire which will revolutionize tire construction. The greatest improvement since pneumatic tires were invented. Patent rights are for sale by Mr. Louis Wenzel, Jr., 404 Chestnut St., Pittsburg, Pa., U.S.A.

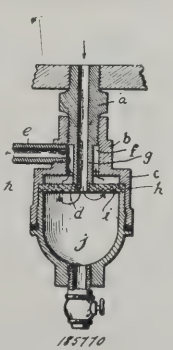
REFRIGERATING MACHINE. Having a double jacket, brine cylinder, with a self-contained expansion tank whereby a relatively greater cooling area is provided with a very small displacement in the cylinder, and having means for insuring the circulation of brine through said cylinder. Patent rights are for sale by Samuel R. Bell, Beaumont, Texas, U.S.A.

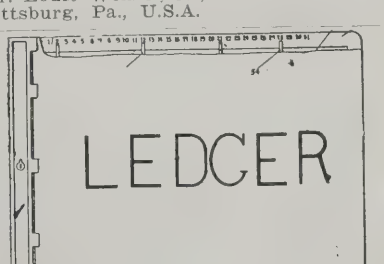




HUMIDIFIER.—This device has already an established market throughout Canada. The demand for this device has become so great that the inventor has found it impossible to handle both the United States and Canadian markets, and is therefore desirous of getting in touch with a real live manufacturer who is willing to develop and push this article in the Dominion. For further particulars and information, apply to Mr. E. G. Fairbanks, 6217-19-21 Wentworth Ave., Chicago, Ill., U.S.A. This device is without doubt the most efficient, economical and substantial of its kind, has been well liked wherever introduced. Correspondence from manufacturers interested is solicited.

GASOLINE STRAINER.—Simple and absolutely reliable device. The strainer is of special felt material, and is superior to any of the present wire strainers. It does not clog, and there is absolutely nothing but pure gasoline or oils that can pass through the felt, which must, of course, be of proper material and adapted for the fluid to be strained. Never gets out of order, and can be easily and quickly attached to any machine already built. May be cheaply manufactured, and placed on the market at a price that will compete with any present devices. Patent rights are for sale by G. S. Hale, Tekoa, Wash., U.S.A.

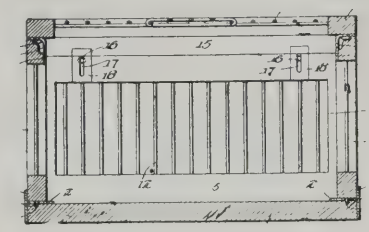




ATTENTION Loose-Leaf Ledger Manufacturers.—This accounting book facilitates the management of many accounts, where attention to the same is required at various dates according to the terms and conditions of the several accounts, to eliminate the losses and inconveniences incident to the lapses of memory in regard to obligations to customers, to devise a new system of accounting operable by comparatively inexperienced clerks and always accessible to the superior, which form of book is simple to operate and cheap to produce. Canadian and United States patents for sale, John Duchow, 319 St. James St., Montreal.

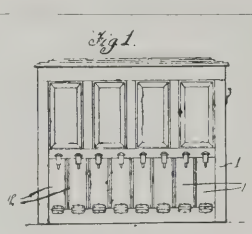
HAROLD C. SHIPMAN & CO., Patent Attorneys, Ottawa, Canada

PATENTS FOR SALE



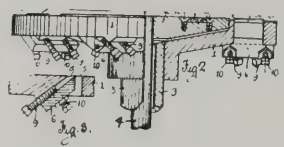
FOLDING CRATE, comprising a bottom having sides and ends hinged and slidably connected together, said hinges and sliding connection consisting of slotted plates having pivot pins slidable therein. The device is strong and durable, absolutely efficient in use and may be placed on the market at a minimum cost with a reasonable profit. Patent rights in the Dominion are for sale by A. Kroner, 300 No. Highland Ave., E.E. Pittsburgh, Pen., U.S.A.

BOTTLE DISPENSER, which consists of a refrigerator and means for serving bottled drinks quickly. If a customer desires any popular drink, simply open the small door on the front of the dispenser and the instant the door closes another bottle slips into place. The dispenser will handle eight different varieties of bottled drinks and have them all ready for prompt serving to trade. No opening of the ice-box and allowing the heat of the room to melt the ice, no more hunting around for any desired or particular variety. Always ready, always on hand. With the recent legislative action, the use of soft drinks is bound to increase and one of these machines can be placed in every reliable soft drink dispensary throughout Canada. Here is a proposition worthy of investigation. Patent rights are for sale by Mr. J. W. Berry, Greenville, South Carolina, U.S.A.





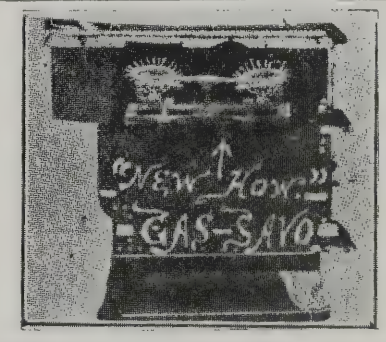
SOAP COOLER AND COMPRESSOR.—A strong, durable and efficient machine for the purpose of cooling and compressing soap in one operation and turning it out of the machine in bars of the proper cross-sectional area to be cut or stamped into hand cakes of soap. The device is without doubt one of the most efficient of its kind that has yet been brought to the attention of manufacturers. The inventor, Mr. Joseph Bock, 615 Epworth Ave., Winton Place, Cincinnati, Ohio, U.S.A., is desirous of arranging the manufacture of this invention in the Dominion with a reliable manufacturer or the outright disposal of his interests.



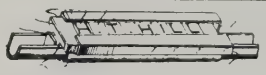
WOOD-WORKING MACHINE for finishing the flat surfaces of woods for all kinds of finished products and having means whereby the rotating disks with the cutters and smoothers fixed therein may be perfectly adjusted to each other and to the surface being finished. The device is simple in construction, strong, durable and absolutely efficient in use. Patent rights for sale by James W. Gray, Tacoma, Washington, U.S.A.

BOTTLE & STOPPER. This simple and ingenious device is very efficient in use, may be cheaply manufactured and placed on the market at a minimum cost with a reasonable profit. Is absolutely sanitary and may be adapted to many different uses. Patent rights for sale by Mrs. Corrie Miller, Schumacher, Ont., Canada.

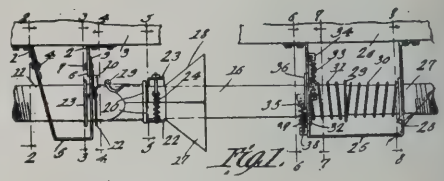




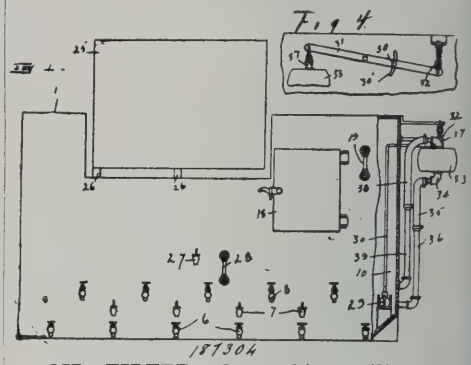
METHOD OF HEATING.—This device is known as the "New How" Gas-Savo Oil-Burner. It is so constructed that it may be installed in any stove or furnace. The device is equipped with special features whereby a gas is produced from coal oil, which gas throws an intensely hot, blue flame. The device is especially adaptable to Quebec heaters and provides one of the cheapest fuels; has no wicks, no fumes, is perfectly safe; easily installed. The inventor, Mr. A. L. Howard, Avonmore, Ont., offers patent rights in the Dominion for sale.



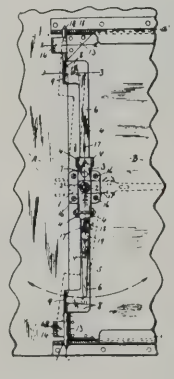
NAME PLATE FOR UMBRELLAS, so constructed that it may be applied in an economical and expeditious manner, at the same time being highly ornamental. Any name or address may be quickly assembled and applied to the ordinary umbrella so as to protect the owner. The name itself may be formed by quickly assembling and applying the proper letter carrying elements, which can be cheaply produced and kept in stock in large numbers in department and other stores where umbrellas are for sale. Patent rights for sale by F. G. Farnham, 515 Park Street, Honesdale, Pa., U.S.A.



TRAIN PIPE CONNECTOR.—A simple, inexpensive and durable connector which may be readily applied to railway cars, having air brake systems and which will properly connect the train line pipes thereof so that there will be no leakage at the joints. Patent rights are for sale by Jacob Obednour, R. D. No. 2, Box 86, Martinsburg, Pa., U.S.A.



OIL FILTER.—One which will reduce the overhead expenses of any large manufacturing firm. This device will reclaim over 85 per cent. of apparently useless oil. Do you realize what this means? The reclaimed oil may be reused and is as good and as clean as before being used. The device has been thoroughly tested, and hundreds of testimonials from manufacturers, engineers and mechanics have been received. The inventor is desirous of getting in touch with a reliable manufacturer with a view to negotiations for the disposal of his interests in the invention, or the manufacturing of same. For further particulars, address Mr. J. H. Packer, Liberty, Missouri.



CAR DOOR LOCK.—A strong, durable and most reliable car door lock; is simple in construction and absolutely efficient in use; may be cheaply manufactured, and will hold the door when closed so that same cannot move out of position while the car is in transit, does away with nailing block or boards to side of car. Makes the door weather-proof and is adapted to be easily attached to the car door. Patent rights in Canada are for sale by the inventor, Mr. C. B. Fink, East Syracuse, N.Y., U.S.A.

Manufacturers interested in patents should have their names on our Service Dept. mailing list

HAROLD C. SHIPMAN & CO. - Patent Attorneys

Ottawa, Canada

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BRANCH OFFICE: WASHINGTON, D.C

SHIPMAN CHAMBERS—131 BANK STREET

Ottawa, Canada, Jan. 7th, 1920

Manufacturing Corporations,
Canada and United States

Gentlemen,-

To-day in business, "Service" is one of the most important selling assets. A motor car, without a service station system throughout the country, would never sell.

We are not the oldest Patent Attorney firm in Canada, but to-day we are filing more Canadian patent applications than any other attorneys. During the past, we have tried to give our clients prompt, personal service in carefully looking after their interests before the Patent Office. We now have a larger service to offer corporations interested in protecting their Canadian rights.

Every corporation employs a certain amount of brain-power. You give them the best tools for experimental purposes, supply them with technical reference books and magazines and then ask them to perfect your lines of product on which perfection you intend obtaining a patent.

Are you giving him a fair chance to make good ?

Good tools and technical reference-guides, coupled properly with guided brain-power, may perfect your line of product but are they working to perfect something on which you can claim patentability ? Our service system can supply you with the missing link, a complete card-index of the Canadian and United States patents pertaining to your line of product. Your brain-power can see an illustration and the claims of patents already allowed, properly classified. This not only gives your brain-power a guide in keeping their experiments along patentable lines but it acts as a reference to show the construction others have worked out, from which your brain-power will often be able to get valuable suggestions.

The brain-power of your corporation can give you better results if properly equipped. A sample of this card-index and full information sent on request.

Yours respectfully,

Harold C. Shipman & Co

Packing House Industry

(*Continued from page* 250.)

year, however, this trade has not opened up. There is no doubt that the demand for meat is there, but until such time as the exchange situation is stabilized or else large credits are granted, the European export trade will be more or less limited. The Central European countries, however, have had their live stock population decreased to a very large extent, and it will be at least five or ten years before they can hope to get back to normal conditions. Even when a normal condition is reached there will always be a heavy demand for meat and meat products owing to the tremendous population of these countries.

A year ago everyone was pessimistic as to what the future might hold in store for the packing-house industry. The war was finished and armies were being demobolized with great rapidity. During the war, plants had been enlarged to take care of the insistent demand of the allied armies for meat. At the signing of the armistice this demand entirely ceased. England was carrying tremendous stocks of meats in cold storage as a protection against a shortage which might be caused by cargoes being held up or sunk by submarines. The packing houses had been keyed up to the fullest extent to keep the supply of meat going forward; therefore, when this demand suddenly ceased it was a cause of great concern as to the future. During the Fall of 1919 Canadian packers had put away large quantities of frozen beef in cold storage to take care of orders which they expected, and were informed they would receive from the British Government. Therefore, with this large stock of beef on hand and demand cut off, the Canadian packers had every reason to be pessimistic as to the future. The British Government were holding great stocks of frozen beef in Australia and the Argentine, which they had bought during the war but were unable to transport on account of shortage of ships. This beef was bought at 10 pence, c.i.f. England, whereas the Canadian beef had cost 23 cents per pound, seaboard. However, later on in the year, Canadian packers were able to sell their entire stock of frozen beef to the Italian Government.

The outlook to-day is entirely different. The domestic consumption has largely increased. Every indication points to the immediate signing of the Peace Treaty, and immediately the necessary credits are arranged, there is no doubt there will be a great European demand for all the meat and meat products which Canadian packers may have to offer. At the present time the exchange on the European currency is at a very large discount, but it is hoped that upon the signing of the Peace Treaty necessary steps will be taken to stabilize the exchange between the European countries and America.

The future success, therefore, of the Canadian packing house industry depends to a large extent on—

1. The farmers increasing production of live stock.

2. The securing of export orders from Europe in competition with the American packers.

Therefore, if the American Government or American financial institutions make loans to European countries with which meats can be purchased, the Canadian Government, or Canadian financial institutions will also have to do the same. This will have to be done if the Canadian farmer is to receive the same returns for his live stock as the American farmer.

FOR SALE

For sale in Western Ontario quantity of Lackawanna Steel Side and Corner Piling. Address, J. E. McKimmie, 838 Marine Trust Co. Building, Buffalo, N.Y.

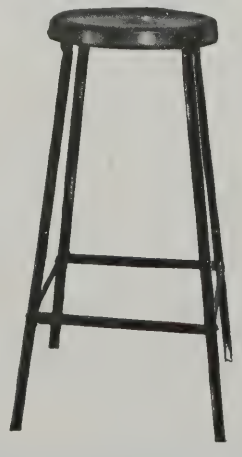
DENNISTEEL
Made in Canada

CHAIRS AND STOOLS



THE best kind for use in factories, stores, locker rooms and wherever hard service is demanded. These durable all-steel chairs and stools end the wood-mending nuisance so costly in time and labor in many plants.

DENNISTEEL Chairs and Stools are fire-proof, warp-proof and wear-proof. Cannot come unglued or become rickety. Seats are all one piece, stamped out of a single sheet, and have rounded edges. Legs are angle steel, reinforced lower down with straps to ensure rigidity. Back rest of chair is adjustable. Finished in baked-on enamel---olive green, black or any other color desired.



WE ALSO MAKE

Steel Shelving Steel Lockers Steel Cabinets, Bins, etc.
Ornamental Iron and Wire Work of all kinds.
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THE DENNIS WIRE AND IRON WORKS CO. LIMITED
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CANADIAN INDUSTRIES EXHIBITION MAKING SPLENDID PROGRESS

Early indications point to a pronounced success in connection with the Canadian Industries Exhibition, to be held in London, England, next June.

To date the actual allotments and reservations written in Canada alone offer sufficient assurance in this respect—and cabled advices received from Mr. H. G. Montgomery, the Organizing Manager in England, indicate further big purchases of space.

Canadian manufacturers, therefore, who have not already signed up for space, and who intend to participate in the Exhibition, would be wise to give the question immediate consideration. Those who have already made their allotments have done so on a large scale, with the evident intention of making their exhibits comprehensive and complete. Such action will unquestionably have a two-fold effect. It will impress British and Continental buyers with the aggressiveness of the individual manufacturers who participate, and at the same time definitely establish abroad the knowledge that Canada is one of the foremost industrial manufacturing countries in the world.

The "Trade Within the Empire" movement is gaining momentum with remarkable rapidity, and Canadian initiative, as indicated by this Exhibition, will place Canadian manufacturers, individually and collectively, well to the front in the race for Empire trade.

Write TO-DAY for full information to O. C. Pease, Sole Canadian Representative, 41 Victoria Street, Toronto.

CANADIAN INDUSTRIES EXHIBITION

ROYAL AGRICULTURAL HALL, LONDON, ENGLAND

June 3rd to 17th, 1920

Canning Industry

(*Continued from page* 191.)

is to be pitied, and, unless he can make good profits, he is an absolute fool to continue in the business.

His business is one of constant worry from the beginning to the end of the season. For the reasons stated above, he is obliged to have inefficient help; then on top of this he deals in perishable goods which require unusual skill and attention to prevent loss.

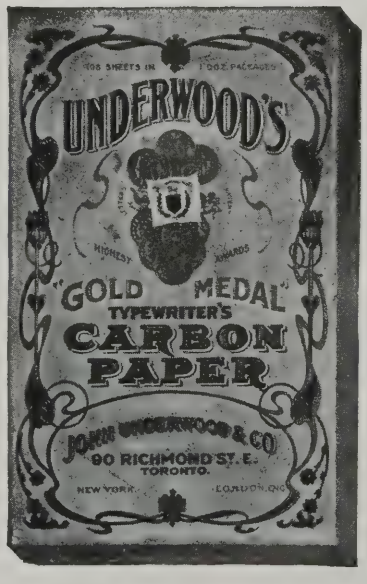
As to the supply and quality of materials for canning, the canner is absolutely at the mercy of the elements. He contracts with the farmers to sow or plant an acreage which, under a normal yield, would give him an amount of goods sufficient to fill his average orders, but there are no normal seasons. Almost every season is abnormal at one time or another; therefore, it seldom happens that the canners have a normal pack of staple lines. He may have a normal pack of peas but a total failure in corn or tomatoes, and *vice versa*.

During the past year, owing to the excessive rains in the spring, followed by excessive drought, the pea crop was only on an average over the province about one-third of a crop. As usual, however, this poor crop was not universal. In one neighborhood, upon soil that could be planted early and which does not suffer from excessive wet, a normal crop of peas might have been harvested. In another section where the land was somewhat flat or somewhat of a clayey nature, the excessive rains followed by the excessive heat would destroy the crops so that the packer only got 10 per cent. or 20 per cent. of a normal yield. Corn suffered equally with peas in the spring and early summer, but the autumn was very favorable for corn and tomatoes, so very favorable that in some localities extraordinary crops of both corn and tomatoes were produced, so that the average corn crop of the whole province was not much below normal, one man having 150 per cent. and another man only having 25 per cent., but after it was all averaged up, it reached nearly a normal. Tomatoes were above the normal crop. The tomato crop was really an extraordinary crop. I believe there never has been a heavier crop, but the acreage was not quite as great as in some previous years.

Then the demand from Great Britain, a demand which I believe is only temporary, took care of any little surplus that there might have been, had we been confined entirely to the Canadian market. Previous to the war it was next to impossible for us to market tomatoes in Great Britain, the imports of tomatoes into Great Britain being almost exclusively drawn from Italy, but conditions had not yet become normal in Italy during the past season. As soon as they do become normal I anticipate that they will again supplant us entirely in the British market. Labor is infinitely cheaper in Italy than in Canada and the climate of Italy is more regular and dependable for the growth of tomatoes, and these two things are mighty factors in the economical production of goods of this nature. As for corn, it is not consumed to any great extent in Great Britain, and we cannot expect to successfully compete with the States to the south of us in the production of corn.

In regard to increased production in the future. There is sufficient canning factory capacity already constructed and in operation to pack very much more than is required by the Canadian public. Not many new factories have been erected since the great cataclysm of 1913 and 1914, when the production was so much greater than the consumption, that a very large number of canning companies went into bankruptcy and when the strongest were shaken to their foundations.

In some sections the supply of raw material, especially



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Carbons and Ribbons

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Manufacturers of Writing Inks, Carbons and Ribbons

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Five Plants Busy Making Powdered Milk

Sixteen years ago, one small plant was sufficient to supply the Canadian demand for powdered milk; to-day we have five modern plants, our own bacteriological laboratories; machine shops for making our own plant equipment, and three busy branch offices and warehouses.

Instead of bringing milk long dusty distances to the city, we build our plants out in the sweet, clean country so that the fresh milk comes to us from the nearby farms.

At our clean plants, the milk is tested for purity, pasteurized and dried by our spray process. We then have powdered milk which is incomparable in quality and a product which is absolutely soluble and natural in flavor.

We hope in the near future to have this product for the world's markets. In the meantime, we are doing our best to supply the Canadian demand.



CANADIAN MILK PRODUCTS, Limited

TORONTO

Montreal **Winnipeg** **St. John**

of peas and of corn, is difficult to obtain owing to the great profits that have been made during the past two years in the growing of sugar beets and tobacco, the sugar beet factory paying $12.00 per ton and upwards for beets which were purchased before the war at $4.50 to $5.00 per ton. So long as this condition prevails, it will be difficult for canning factory owners to purchase peas and corn in those sections, at a price that will enable them to compete with other sections of this country or with the United States, in the production of these two articles, but I think it is fair to assume that the production of sugar will so greatly increase in the European countries from which large exports were made before the war, that our sugar manufacturers will not be able to keep up these very high prices permanently.

Biscuits and Confectionery

(*Continued from page* 186.)

on lines that could be produced in larger volume, and omitting those that require more labor to produce.

There has been a steady demand for some time for the better quality of goods, which has been increased this year. Prices have necessarily had to keep pace with cost. Marketing conditions have been handicapped in many parts of Canada, owing to unsatisfactory railway service. This particularly applies east of Ontario, and north of the Province of Ontario, also the lower provinces. Export business has not been a factor with us, as our domestic requirements have been demanding more than our output.

The demand for our products has been good, and we look for a continuation of this demand for some time to come. No doubt, in the course of a year, or a year and a half, there will be danger of over-production, particularly if export of our class of products ceases, which it is likely to do, when the British and other countries get steadied down to business and commence exporting, which they are making arrangements for.

Nearly every factory in our line of business, has also increased its capacity. There are also a number of new factories started and in process of starting. Some of these manufacturers have exported largely or entirely. With these possibilities facing us, the outlook would seem to be a strong prospect of over-production, which may or may not be overcome by increased consumption through steady employment and immigration.

OUTPUT ONLY LIMITED BY LABOR

By W. D. Ganong

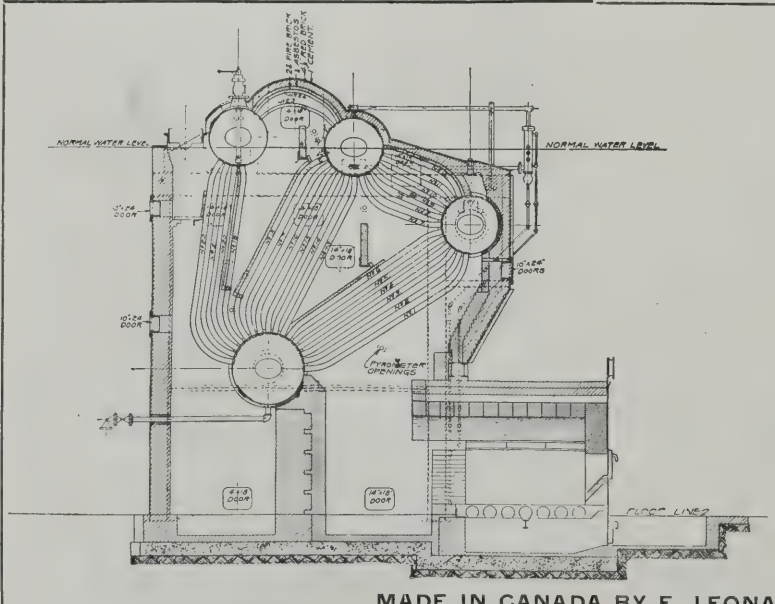
President, Ganong Bros. Limited, St. Stephen, N.B.

Our output of goods has been curtailed by the amount of labor we can obtain. We are in a small town and we cannot get the necessary female help. We built a boarding-house last year, which will hold sixty girls, and which is now full, almost all New Brunswick girls from the smaller places. We have, however, about double the help we had last year.

Re raw materials, we are having a good deal of difficulty in obtaining these. We carry a very heavy stock and plan on never running out. Our chief difficulty has been in obtaining woodenware.

We have increased our production and sales materially. We find people willing to pay almost any price for candy and, while the increase has been on all lines, the greatest demand is for the highest grade of chocolates that we make.

There has been a big export demand for confectionery. During the last month we have not had so many enquiries, but before that we had a great many letters, particularly from the United Kingdom. The manufacturers in the United



CONNELLY WATER TUBE BOILERS (Patented U.S. & Canada)

are of the 4 drum type, have 100% tube area in the path of circulation, and deliver steam superheated to from 5 to 10 degrees Fahrenheit.

Simple in design, no flat surfaces, no stay bolts, no crown bars, no braces, no handholes, free from joints.

All parts easily accessible for cleaning, both internally and externally.

Can be built in units from 200 H.P. up to 4,000 H.P. and for working pressures up to 300 lbs.

100,000 H.P. in successful operation.

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Dependable Spark Plugs



Champion "Heavy Stone"
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B 43....⅞-18
B 53....⅞-long
Price $1.25



Champion "O"
For Overland Cars
A 14 "O", ½ inch
Price $1.00



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A 15, ½ inch
Price $0.90

—are regular equipment in over 250 makes of Motor Cars, Trucks, Tractors, Farm Engines and Motor Cycles in Canada and the United States.

The reason back of this is that Champion Spark Plugs have successfully met every test to which a spark plug can be subjected. Champion 3450 insulators stand up under the extremes of heat, cold, vibration and shock, and give satisfactory service under every condition that spark plugs must meet.



Champion
"Maxwell"
for
Maxwell Cars
A 44, ⅞-18
Price $1.00

It doesn't matter what make of car or gas engine you may have or what it is used for---there is a "Champion" that will meet its requirements efficiently and economically.

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Remember this fact when making replacements.

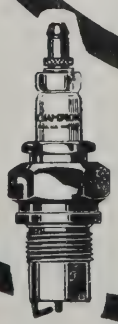
Sold where Motor Supplies are sold.

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Windsor, Ontario



Champion
"Studebaker"
for
Studebaker Cars
A 13 ½ inch
Price $1.00
A 43, ⅞-18



Champion "Buick"
for
McLaughlin Cars
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Champion "Aero"
Truck
Jas 43, ⅞-18
Price $1.00

Kingdom have been curtailed on sugar, and for next year they are to have only 75 per cent. of the sugar they had in 1915. Unless there is some embargo placed on confectionery, there should be a big demand for export, if business continues as good in the United Kingdom as it is at present.

Regarding the outlook, there is undoubtedly a big demand for confectionery, chiefly for two reasons: first, the increase in wages and the fact that the younger men are getting far better wages than ever before; also the young women, and these are large purchasers of confectionery. Second, the prohibition law has undoubtedly affected the candy business.

WITHDRAWS FROM FOREIGN MARKETS

By C. E. Edmonds

President, Christie, Brown & Co., Ltd., Toronto

Until the latter part of the past year labor was exceedingly scarce. Raw materials were higher in price, but deliveries were easier. Production has to some extent been decreased by our having reduced hours of labor from 50 to 44 hours per week, and our inability to secure a sufficient number of satisfactory workers to make up for the loss in time.

We have noticed an increased demand for high-grade goods, and prices are higher due to increase in cost of production. The demand of the home market being in excess of supply, we were compelled to withdraw from foreign markets.

Our opinion is that the demand for our product will not diminish as long as money is as free as at present, but the outlook *re* cost of raw material and labor does not encourage one to make a material enlargement of plant. As a matter of fact, our equipment is of a capacity to enable us to vastly increase our output if the class of labor that we employ could be secured to meet our requirements.

FINDS GOOD INCREASE IN BUSINESS

By J. A. Marven

J. A. Marven Limited, Moncton, N.B.

We have not had the trouble with labor that we experienced last year. Our employees are working much more steadily, and we have been able to secure all the help we require. We have nothing to complain of with respect to raw materials and have been able to get everything with the exception of a few lines, very satisfactorily.

We have had a very good increase in business during the past year, our output being from ten to fifteen per cent. better than last year. We find that the trade is calling for a much more expensive line this year; in other words, the lower grades of biscuit are only selling in limited quantities, and our most expensive lines are in great demand. Our export business is developing very slowly.

We are looking for good business during 1920, and hope that it may continue. We have increased our plant by some 36,000 feet of floor space, which we hope to have completed in the early spring.

CONDITIONS IN EXPORT FIELD FAVORABLE

By G. M. Morgan

Export Manager, Canadian Biscuit and Confectionery Export Co.

In exports the past year has been a banner one for Canadian manufacturers of confectionery and biscuits. The exact value of goods going to outside markets, cannot at the moment be ascertained. From our observations and information received, we would place same at approximately $4,000,000. This is very gratifying, when we take into consideration that in the pre-war year of 1914, the customs blue book shows in confectionery less than $5,000 as being exported.

The present position is abnormal, in so far as the English market is concerned, due to the fact of war restrictions and sugar shortages. This condition has made it possible to place Canadian products, irrespective of quality and price. However, we feel in order to make our present positions permanent, it will be necessary to watch very carefully the manufacture, as quality will determine to a very great extent our future. The export business cannot be taken lightly, nor as a temporary antidote for unsatisfactory local conditions. To engage in it necessitates being always prepared to supply at short notice what foreign clients want, whether domestic business is low or booming.

There is no doubt in our minds as to the future of Canadian biscuits and confectionery in the export field, provided that the goods are of the right quality and that our prices are not in excess of those of our competitors. The Canadian Biscuit and Confectionery Export Co. is doing all possible to further the interests of the trade in general, and have representatives now in the West Indies and South America, and have under consideration the exploitation of Oriental, Australasian and African markets, as we feel that Canadian-made products in the lines mentioned can compete favorably with goods manufactured in other countries.

Boots and Shoes

(*Continued from page* 190.)

per cent. to 100 per cent. higher than it was a year ago. We have not found it necessary to enlarge our capacity, as there is considerable competition between manufacturers for the help available, and it will be a serious question when additions now being built are ready for operation, and the supply of help which is already shorter than the demand has to be found.

We have found that the tendency this year as regards demand has been considerably increased, especially on men's shoes, and the demand has been for shoes of a good quality, the cheaper lines being hard to move. Prices have advanced materially, but instead of preventing buying it has tended rather to stimulate it.

We have not been engaged in export business on account of the large home demand, but we believe this has been a factor and had we been in position to handle any of it we could have had sufficient to keep us running at capacity for many months. We believe it has been a factor, though a small one, in general conditions as regards prices and supplies of raw materials, but so few manufacturers have been engaged in it compared with the total number of manufacturers in the trade, that we do not think it has made any serious difference to Canadian conditions.

Our opinion is that the present conditions are not healthy and the demand for shoes is in excess of actual requirements. It is impossible to predict how long present conditions will last, and we would not venture a prophecy in this connection. We have no plans for factory enlargement at present on account of our belief, already mentioned, that present conditions will not be permanent, and in addition to this the uncertainty as regards tariff, and the irrational workings of the Board of Commerce would be sufficient to deter us from entering on any such plan at present even though we were otherwise disposed and in position to enlarge.

INFLUENCE OF BOARD OF COMMERCE FELT

By Clayton E. Hurlbut

The Hurlbut Co., Limited, Preston

The labor situation with us has been satisfactory except for a lack of female workers. Other manufacturing conditions have been favorable. Our production has been increased and during 1919 was somewhat larger than in 1918. We have en-

—FIVE FACTS—

vital to every business man

I.

In case of fire your insurance policy will cover only a fraction of your loss. This is proved by the fact that you would not sell your steady-going business for the face value of that policy.

II.

You are afraid of fire. This is proved by the fact that you carry fire insurance and pay a substantial premium for it.

III.

Fire danger in your building can be practically eliminated by an installation of Grinnell Automatic Sprinklers. In over 20,000 reported fires the average loss under Grinnells' has been only $270, a reduction of 96-2/5 per cent. over the lowest average business losses prior to their invention.

IV.

Your insurance rates can be reduced 40 to 90 per cent. The insurance companies are glad to make this reduction because Grinnells' reduce to a minimum the loss they have to pay.

V.

Grinnell Automatic Sprinklers pay for themselves and then pay you. The insurance rate reductions are usually sufficient to wipe out the initial cost in a few years. After that their savings are clear profit.

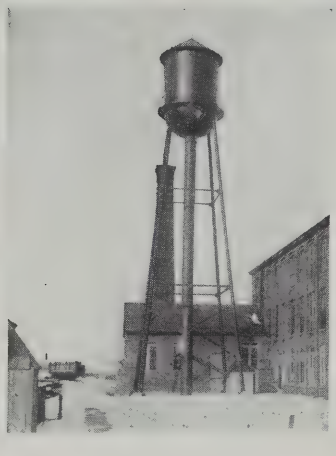
Two thousand men will see the business efforts of a lifetime destroyed by fire this year. The insurance companies will return them a large part of their actual property loss, but cannot repay them for the equally large losses due to lost profits, interrupted operations, and general business demoralization. Preparation now is better than reparation then—especially when the reparation is only half-measure. Our estimates and proposals are free. Ask for them now. Address:

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Industrial Piping, Heating and Power Equipments. Fittings, Pipe, Valves



HALIFAX, N. S,
DOMINION TEXTILE CO., LTD.
40,000 gallons, 100 foot tower
Sprinkler Service



TRAIL, B. C.
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40 foot by 5 foot Rotary Rock Coolers fitted with gears and mechanism

We specialize in the construction of Elevated Steel Tanks and Towers and all types of steel plate work, Hoppers, Bins, Pipe Lines, Smoke-stacks, Penstocks, Cylindrical Kilns and Driers. We also build Steel Buildings, Bridges and Industrial Specialties.



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50,000 gallon, 100 foot tower Gravity Tank
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Distributors of: International Kerosene Engines, Tractors, Ensilage Cutters, Hay Presses, Cream Separators and ***MOTOR TRUCKS.***

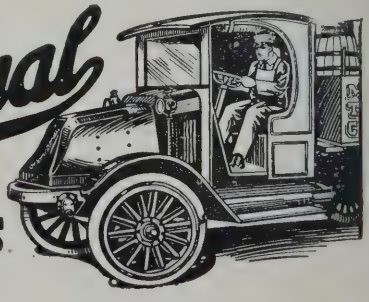
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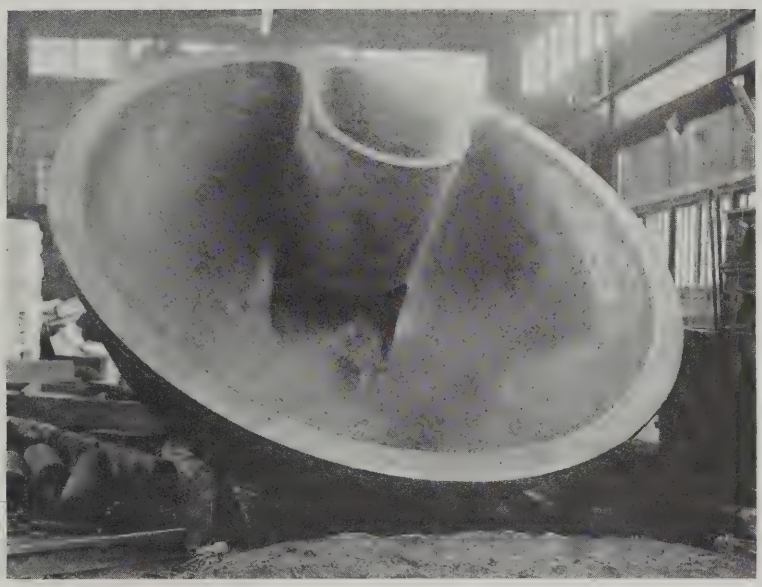
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WORKS:

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The Wabi Iron Works, Limited	New Liskeard, Ont.

larged our capacity by the addition of a fitting-room at St. Mary's. The market demand for shoes has been fair, but there seems to be a tendency, which did not prevail last year, to question prices. The Board of Commerce ruling on retail profits may result in lessening demand in lines other than staples and even on staples. The retailer will hesitate to order far ahead as he will not have the incentive of higher prices. How this will affect manufacturing is hard to determine at this time. Export business has not been a factor. We regard the outlook as uncertain.

DOES NOT LOOK FOR ANY FALLING OFF

By C. Dufresne
Dufresne & Locke, Limited, Montreal

We must admit that we experienced considerable trouble some time ago regarding labor. However, we thought it advisable to go into the matter thoroughly with our employees, and although we found it necessary to increase the wages from 30 to 40 per cent., and even 50 per cent. in some instances, the matter was adjusted to the entire satisfaction of all concerned.

Leather of all descriptions is extremely scarce and prices are exorbitant, but the demand being so great it is not at all surprising. Machinery, findings, etc., have also followed suit, and even at advanced prices it is not always possible to procure the article wanted.

Business to date has been very satisfactory. Our output so far has considerably surpassed the amount of business accomplished during the same period of 1918. In fact, we have found it necessary to increase our capacity about 25 per cent. to meet the ever-increasing demands. The boot and shoe trade in general seems to be very good. This is no doubt due to the return of so many troops and their dependents. Previous to the signing of the armistice, merchants only ordered in sufficient quantities for their immediate requirements, and had nothing stocked ahead. The hope of lower prices was evidently the cause. Hence there is quite a shortage now, and although prices are higher than ever, the goods must be had regardless of cost.

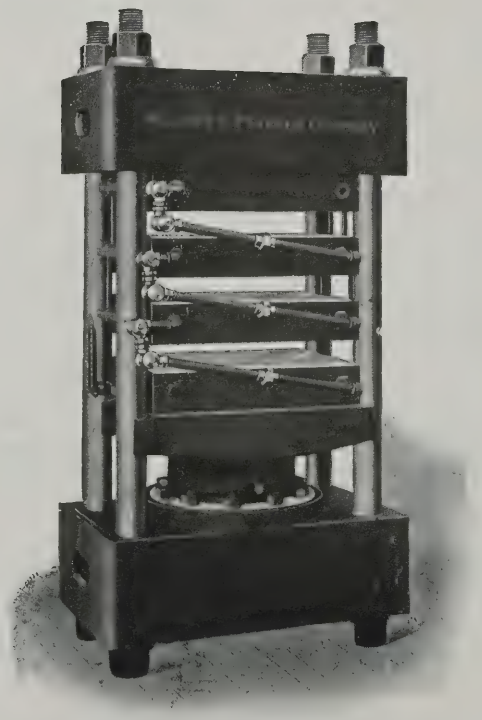
There is great demand from abroad for all staple lines, and the large export business now in force also tends to the scarcity of merchandise in general for the home market. We have undertaken quite an item of French business, particularly in men's lines. However, we find shipping very slow. All foreign ports seem to be greatly congested with freight, and the length of time it takes shipments to reach their respective destinations is beyond the ordinary. This is a great hindrance to the shipper as regards payment of goods, etc.

Regarding future business, we certainly think there will be no falling-off. Owing to the extremely high prices we had to quote when sending out spring samples, we did not anticipate many returns, and must admit that we are surprised at the number of orders that have already been booked for spring delivery. An extraordinary fact is that the jobbers are now placing orders at higher figures than what they are actually charging their customers for goods. We are indeed well pleased with the results of 1919, and from present appearances business will no doubt be exceedingly flourishing during the coming year.

CONDITIONS STABLE FOR NEXT FEW MONTHS

By G. W. McFarland
Managing Director, Williams Shoe, Limited, Brampton

We have no hesitation in saying that there has been considerable improvement in the labor situation during the last year, in so far as being able to secure inexperienced



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HYDRAULIC,
POWER SCREW
AND FILTER

for all purposes

William R. Perrin, Limited
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On account of the service offered, we number among our friends most of the Governments, Federal and Provincial—Municipalities, Banks, Transportation Companies, Corporations, Professional Firms, Colleges, Schools, etc.

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Wire Partitions
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and Stock-rooms

Wire Machinery Guards

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C. H. JOHNSON & SONS, LIMITED

Wire Works: St. Henry, Montreal

male help is concerned. There has been during the year, and there still exists, a scarcity of experienced shoe operators. We have been, speaking for our own factory, taking on green help and training them in the different departments. There has been, however, a serious shortage of both experienced and inexperienced female help, and this still exists.

We have experienced no difficulty in securing all the supplies of raw material that we require. Prices, of course, have been extremely high, especially during the last six months, in so far as leather is concerned. Findings have also been advancing, but, as already stated, these materials have been procurable in practically any quantity required.

There has been a gradual increase in production during the year, our output for the last three months of this year being 50 per cent. over last year. There has been a slight increase in capacity, as, owing to the shortage of female help, we were compelled to open a branch fitting-room in another town, which has enabled us to keep the other departments of our factory up to something near capacity.

There has been a very keen demand for shoes during the past year. The demand has been greater than our capacity, and we have been compelled for this reason to decline considerable business. The demand has been for good quality of footwear. Prices have ruled high, and prices for spring booking are higher than at any time during the past four years. Owing to the heavy booking and the comparatively low production, the deliveries have not been as satisfactory to the retail trade as could be wished for, but, on the whole, the merchants have shown a fine spirit and have been exceptionally patient, realizing as they did the adverse conditions under which the factories were working.

Owing to the very heavy domestic demands, we have not manufactured during the past year any shoes for exporting, although we had the opportunity of placing a large volume of business in the English, French and Belgian markets.

One can only make a rough guess of what the future holds for the shoe industry as regards production and distribution. We believe there will be a gradual improvement in production, providing labor conditions will remain normal and there is no further reduction in the working hours. We are not at the present anticipating enlarging our plant. We are, however, installing additional machines in several departments, which we expect mill be a means of increasing our output from about 25 to 40 per cent., which additional production we require in order to take care of our domestic orders. We do not, however, anticipate any marked change in conditions for the next four or five months. Beyond that time it would be hard to predict.

Mining Industry

(*Continued from page* 201.)

impetus was given to the production of pyrite in Canada. The supply of Spanish pyrite, which had been used in the manufacture of sulphuric acid, was no longer available on account of lack of shipping. Pyrite deposits were mined extensively in Ontario, Quebec and British Columbia. With the close of the war the explosives industry fell off and less pyrite was mined. A large quantity of sulphuric acid is consumed in the phosphate industry; it seems likely that the return to normal conditions may be accompanied by greater efforts to replenish the fertility of the soil by the application of artificial fertilizers. As potash and nitrates become more readily available it is probable that the whole fertilizer in-

J. G. G. KERRY
President

DAVID F. ROBERTSON
General Manager

PAPER BOX BOARDS

PLAIN STRAWBOARD
NEWS LINED STRAWBOARD
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NEWS LINED CHIPBOARD
VAT LINED CHIPBOARD
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The Northumberland Paper and Electric Co., Limited
CAMPBELLFORD, ONT.

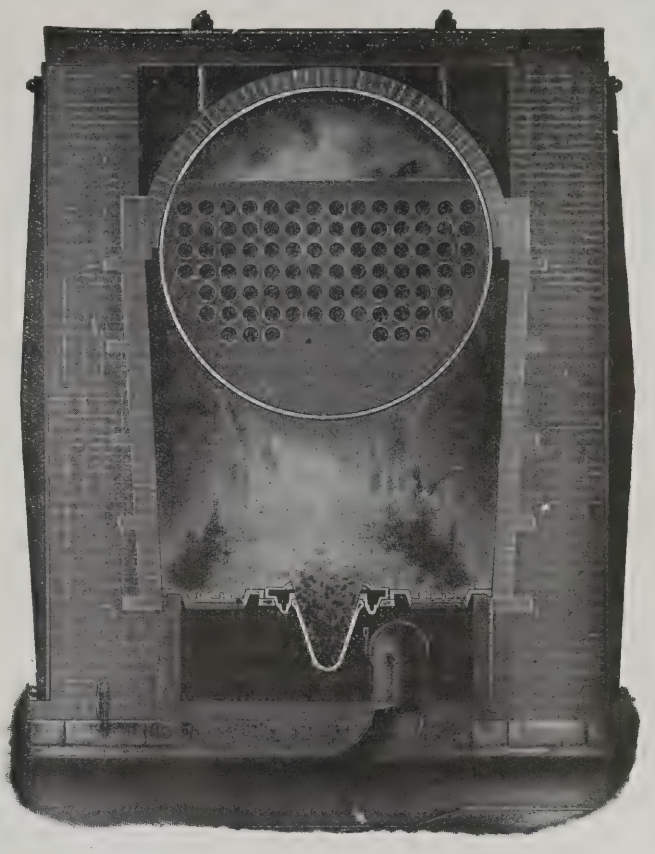
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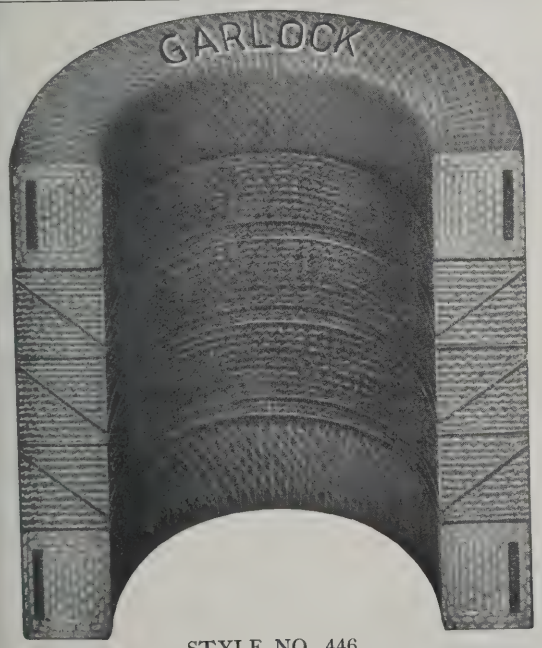
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dustry will greatly develop and a greater demand be made for sulphuric acid for treating the natural phosphate.

The great proportion of magnesite used for refractory purposes in America prior to the war was obtained from Austria. Soon after the outbreak of hostilities deposits of magnesite in Quebec that had received only moderate development were quickly put in a position to furnish supplies for the American market. A thriving industry was established. Large deposits of a very fine quality of magnesite were opened later in the State of Washington, but the Canadian product was favored by much greater proximity to the markets, the metallurgical industries using magnesite being situated mainly in the eastern part of the continent. Canadian producers are apparently confident of being able to hold their own against all competitors at least for some time to come, as the two most important companies have been spending considerable money in erecting calcining plants.

Discovery of Potash Minerals

The war forced Canada to a keen realization of her dependence on Europe for potash. A discovery made in 1919, however, raises hopes that at no distant date a measure of independence in this report may be attained. Potash minerals have been discovered associated with the salt deposits at Malagash, Cumberland County, Nova Scotia. Further investigation is necessary to ascertain the extent of the salt beds and the proportion of potash they contain. The discovery of potash is leading to further prospecting by boring. There are a number of places in Nova Scotia and New Brunswick where salt springs indicate the possibility of the occurrence of salt beds. Abraham Gesner, writing in 1836, about the salt springs along the coast of Northumberland Strait, said: "The infancy of the colony is a trite apology for not entering into useful speculations, but it seems impossible that any country can arrive at manhood when little pains are taken to develop its growth."

Even if potash should not be found in commercial quantities, the occurrence of beds of common salt in a province so well supplied with coal and with so extensive a fishing industry should appeal to the business instincts of enterprising Canadians.

Money Being Invested in Mines

There has been no lack of money for investing in mines, particularly silver and gold mines. Money has also been available for sending out prospecting parties and for the development of prospects. The division of the Geological Survey, whose duty it is to supply information to the public, was early aware that the year would see a great revival of prospecting. There was a demand for information about the geology, the known mineral deposits and the prospects for the discovery of minerals in parts of Ontario, Quebec and Manitoba, in Alberta, Northern British Columbia and other parts of Canada.

Information was desired regarding the Pre-Cambrian areas in which prospecting was most likely to be rewarded with the discovery of valuable minerals, especially the precious metals. Gold never falls below a fixed value, is never mistaken by the experienced prospector for less valuable minerals, is pleasing to the eye, and carries with it the glamor of romance. Silver had become doubly attractive on account of the great increase in price. The summer of 1919, therefore, saw greater prospecting activity than had been since the few years immediately succeeding the discovery of the rich native silver veins of Cobalt.

There seems to have been little difficulty in procuring money for carrying on prospecting for petroleum. The war taught the public the value of petroleum as a fuel and as the



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source of gasoline on which motor transport is so dependent. The consumption of petroleum has been proceeding at an alarming rate and petroleum geologists estimate that the approximate exhaustion of the present known sources of supply will take place at no very remote period. The feeling that the future of the petroleum market is assured, whether the nation be given over to wasteful expenditure in luxuries or to thrift and intense economic production, has aroused much interest in the possibilities of discovering new natural reservoirs of this convenient fuel.

Oil Possibilities in Alberta

Interest has been centred in the Province of Alberta. Some drilling was done in this province during 1919, and drilling rigs were taken down the Mackenzie for testing the possibilities of the Devonian formations. Geologists were engaged in working out the structure of the rocks in Alberta and ascertaining what areas presented conditions most favorable for the accumulation of oil. Much attention was directed to anticlinal structures in the foothills and it is expected that extensive drilling operations will be conducted during the year 1920.

Of the investigations carried on in Ontario those of Dover township were perhaps watched with greatest interest. In this township deep wells were sunk to test the Trenton formation and flows of gas and oil were struck. The Palaeozoic formations of the James Bay region are also beginning to attract attention.

Considerable interest was manifested in the oil shales of New Brunswick, but no plant for treating them has yet been erected. The shales are not of uniform composition. If, as is claimed by interested parties, the average composition of large bodies is such as to admit of retorting the whole mass with profit, then the industry when established should have a long tenure of life. The time is ripe for a thorough testing of the possibilities of the oil chales of New Brunswick and Nova Scotia.

In the early part of the year there was quite a little talk of making use of the aeroplane for purposes of exploring and prospecting the more remote areas of Canada, but apparently nothing effective was accomplished.

The adverse rate of exchange between Canada and the United States has been leading some manufacturers to make inquiries as to the possibility of procuring in Canada certain mineral products that have heretofore been to a large extent imported. In some cases the minerals are mined in Canada and production is capable of expansion; in other cases the minerals are available, but are not being mined. To get production of such minerals started, often all that is needed is the knowledge that there is a steady market for the product, and a little consideration on the part of the purchaser until the industry has got well on its feet.

To predict the future of the mineral industry is impossible. One satisfactory feature is that the labor situation in Canada at present is probably better than it is in any other country that was engaged in hostilities. The unrest in other countries, the unsettled financial situation and the high rate of exchange produce a feeling of insecurity. The world was war-weary; it entered upon a long holiday which it is spending in orgy of luxuries. Gradually the holidaying will cease, and gradually the people will learn that the solution of the present unsettled and unsatisfactory conditions lies in intensive work, thrift and economy, and an unselfish co-operation between employer and employee. The recovery will be gradual but there are already evidences of its approach. When it comes the mines of Canada will be so developed that they will be in a position to contribute much towards reconstruction and the re-establishment of basic industries.

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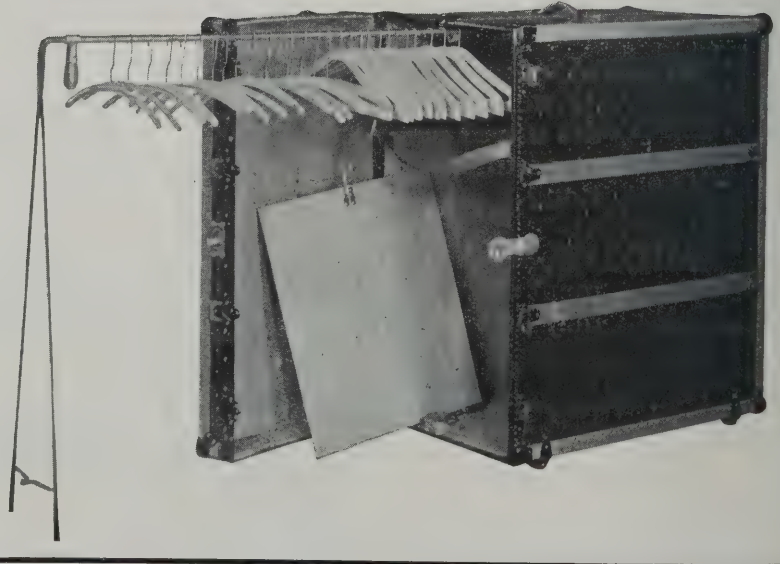
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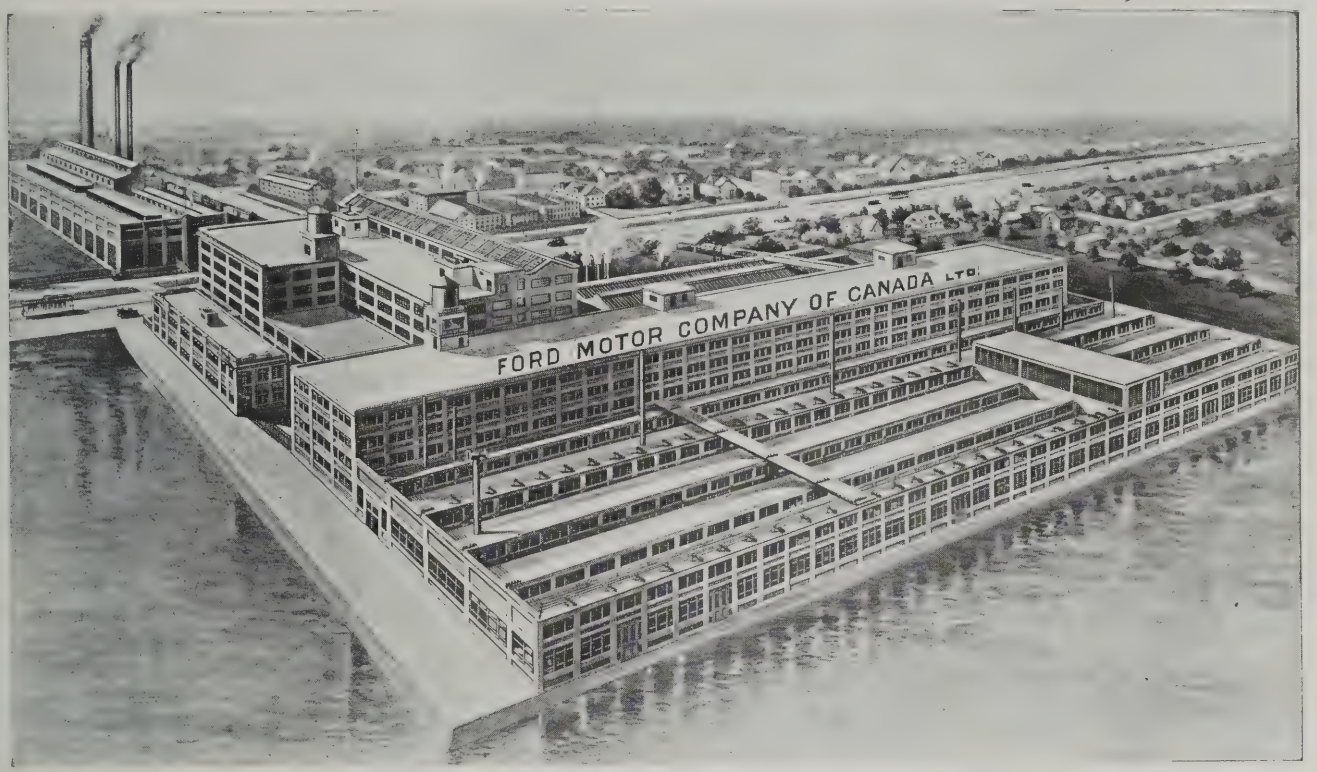
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Paint Industry

(*Continued from page* 203.)

that the export trade seemed to think that the markets of the world were going to drop, but since prices have held firm and they are commencing to see that there is no decline to take place, it is gradually coming back to its own again.

The outlook for the coming year is even better than that of a year ago, the demand being much greater, and it is going to tax our manufacturing facilities much more than in the past, in order to cope with the situation. Regarding enlargement of our plant, we would say that we have machinery ordered, and when in operation will quadruple our plant to that of 1912, and the possibilities in the near future, if conditions continue as at present, are that we will be forced to vacate our present premises and build a plant equal to all occasions.

INDICATIONS POINT TO BRISK DEMAND

By Ontario Manufacturer

Labor has been restless, looking for the maximum wages and giving only the minimum of production in return. Even what we consider our best men seem to produce less than in pre-war days. Raw materials, generally speaking, have been more difficult to procure than during the war years.

At present production is greater than a year ago, and apparently will continue, from present outlook, on an increasing scale well on into the spring months. The demand at present is much larger than a year ago. Industries using paints and varnishes to finish their products are all busy and buying freely. Jobbing houses and retail merchants and decorating concerns are buying more freely for spring shipments than a year ago.

Generally speaking, by reason of the higher cost of raw materials, increased labor and overhead expenses, prices are higher than a year ago, but notwithstanding this, orders were never easier to obtain.

Export has never been a large factor in the industry, but is increasing to some extent, and we believe will develop considerably during 1920.

Indications point to a very brisk demand during the first six months of 1920, and, generally speaking, we believe the industry on the whole, throughout Canada, will be able to take care of the demands that may be made upon it.

Musical Instruments

(*Continued from page* 205.)

curtailed our production to a certain extent. Our production, however, in 1919 was over two hundred per cent. greater than in 1918, and we look for at least one hundred per cent. of an increase in 1920. We are making arrangements for necessary equipment and factory space for this production, and if we secure the necessary raw material and labor, we do not expect any difficulty in selling this quantity. With reference to the quality of cases in demand, we would advise that the better grades are more in demand than the cheaper ones. We have never developed export business, as we have not as yet been able to take care of the local trade.

OUTPUT INCREASED FIFTY PER CENT.

By R. L. Chilvers

Berliner Gram-o-Phone Company, Limited, Montreal.

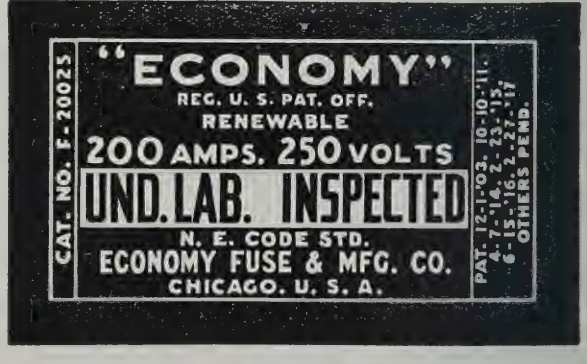
Production has been increased to a large extent, and present output is approximately 50 per cent. more than a year ago. The demand has been for the best quality goods. Prices on talking machines have been considerably advanced,



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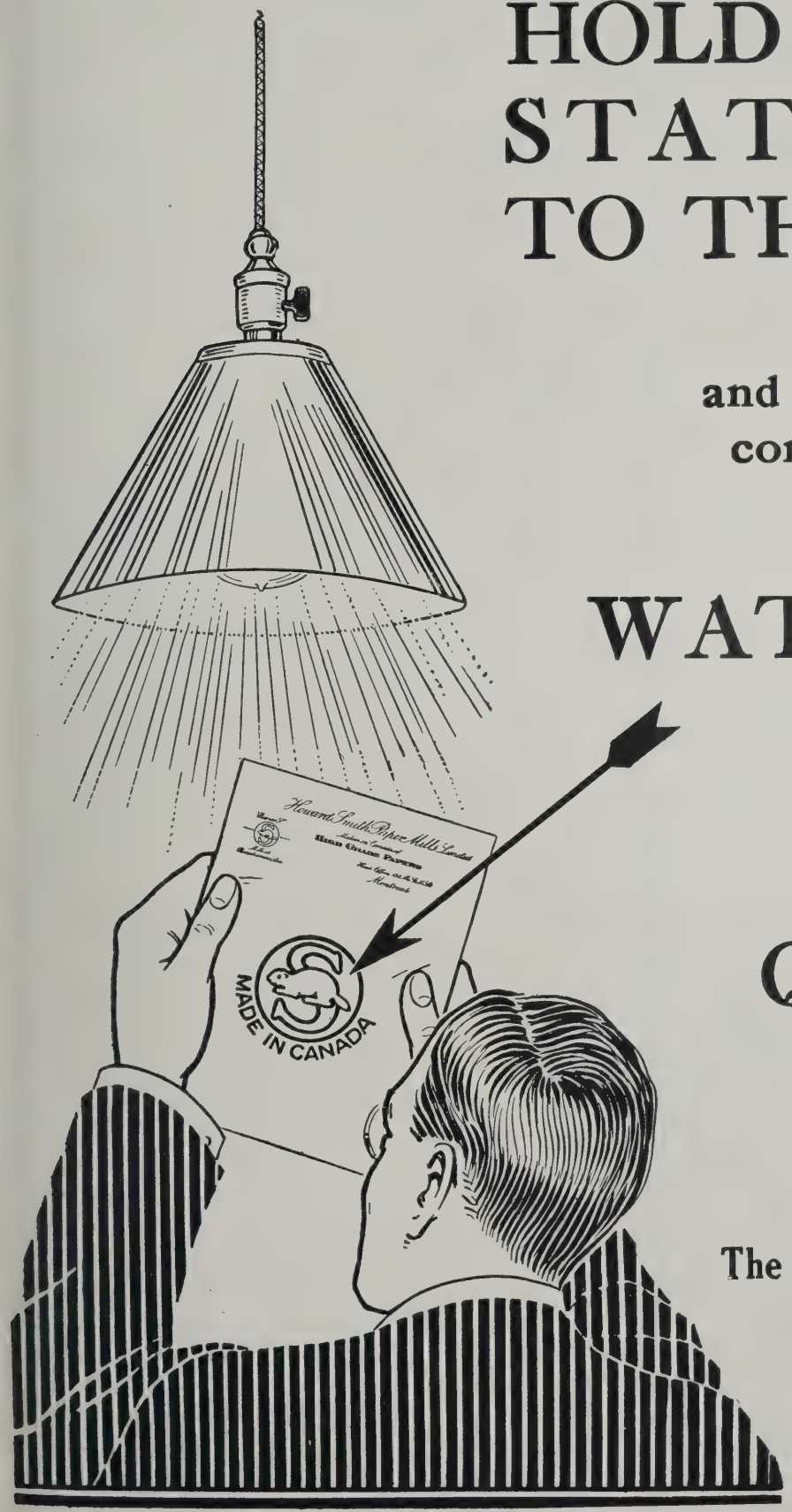
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but this has not affected the demand, while "His Master's Voice" records, which have not been advanced, although the cost of manufacture has gone up very considerably, are in greater demand than ever before. We think the demand is likely to keep up and we are making plans for considerable factory enlargements.

LABOR SCARCE AND MATERIALS HIGH

By E. C. Scythes
Nordheimer Piano & Music Co., Ltd., Toronto

Labor is certainly a most difficult and unsatisfactory proposition with piano manufacturers to-day, and there are few factories with a full complement of men. Not only is there an acute scarcity of dependable men, but the production per man is considerably below that of pre-war periods, when wages were about half the present cost. The outlook shows no element of cheerfulness.

A large proportion of the supplies and materials used in piano manufacture must be imported, for the reason that they are not available in Canada. These importations are in U.S. funds, and it is easy to see what the rate of exchange means in piano costs.

Prices are of course abnormal, so much so, that they no longer cause comment, other than the observations resulting from cost analysis which, each succeeding month, are more distressing. The purchase of supplies is largely hand to mouth buying, and on the seller's terms, which means at whatever the prices may be on date of shipment. This may be from a week to three months from the date of ordering. In the matter of ivory alone, a very recent advance in price was sufficient to increase the cost of a piano by approximately ten dollars per instrument. The Canadian manufacturer is in competition with England, France, Germany, Italy, Australia and the United States in the purchase of supplies.

Nominally, production is about equal to that of 1913, and for 1919 will be no greater than in 1918. Occasional factories report a larger output than ever before, but against these is the underproduction of a greater number of factories and a curtailment due to incipient strikes and to a strike of a month's duration in the Quebec plants, with the subsequent

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cut in production for a number of weeks following, due to some of the operatives having remained at other work secured while on strike. Machinery methods have not yet been discovered to balance the shortage of man power.

Export business in Canadian pianos is not an important factor in the business at the present time, because of the impossibility of turning out sufficient instruments for the home market. The trade is regularly in receipt of inquiries from New Zealand and Australia, South Africa and Great Britain. Some shipments have been made to these countries, and even to China and Japan, but reference to the blue book will show that the total export business is very small indeed. It is unfortunate that the possibilities of the foreign buyer cannot be taken advantage of, but under existing labor conditions, primarily, and the conditions governing in materials and supplies, export trade in piano interests only a few of our manufacturers.

There is nothing in sight to justify other than optimism, so far as the demand for pianos is converned. Costs, of course, continue to increase, and whether they will get to a point where piano prices will be forced up so high as to restrict sales, none can foresee, but the trade is fortified by the certain knowledge that the public had adopted a positive attitude concerning the necessity of the piano in the complete home, and that where there are children, the absence of an instrument is unthinkable.

Shipbuilding

(*Continued from page* 214.)

ing the supply of raw materials and other manufacturing conditions are fairly favorable.

Costs of production have increased greatly during the year, due to higher priced material and labor, particularly labor. Large increases were granted here in May of this year, and a forty-four hour week introduced.

Contracts for ships are not forthcoming, at the present moment, either from the Canadian Government or abroad. The British shipbuilder can still underbid us considerably and give reasonable deliveries, and as we have no protection of any kind we are not able to compete. We have only two ships in hand at present instead of six, for which we have room.

The future of Canadian shipbuilding is not at all bright at the moment. Lake owners are not in the market owing to the high prices ruling and, as stated above, foreign owners can buy to better advantage in Great Britain. Without some form of Government assistance, Canadian shipbuilders can not possibly compete with such countries as Great Britain, Japan and Norway.

We have delivered four ships to the Canadian Government during 1919, namely, "Canadian Warrior," "Canadian Recruit," "Canadian Signaller," and "Canadian Gunner," and will launch the "Canadian Farmer" before the end of the year, leaving the "Canadian Observer" on the stocks. At our Kingston plant we will launch the "Canadian Beaver" before the end of the year. These ships are 3,995 tons dead weight and are built specially for ocean service.

THE INDUSTRY IN BRITISH COLUMBIA

From Vancouver Province

British Columbia shipyards in 1919 exceeded the 1918 output of 14,900 deadweight tons, and have contracts for 65,600 tons, most of which are well on the way to completion.

The total of steel and wooden ships built and launched at B.C. shipyards during 1919 is ten steel and forty-six wooden, tonnage 170,500. Four of the steel vessels were for the Imperial Munitions Board, six for the Canadian

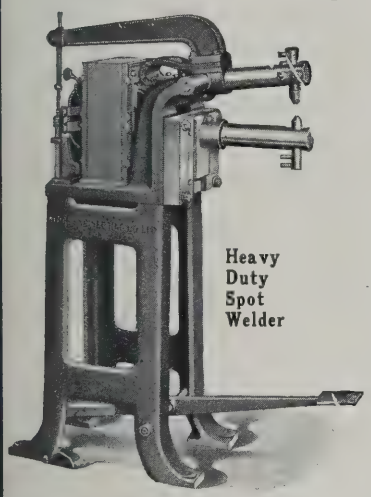


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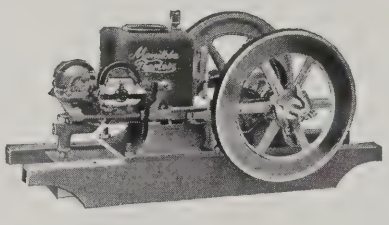

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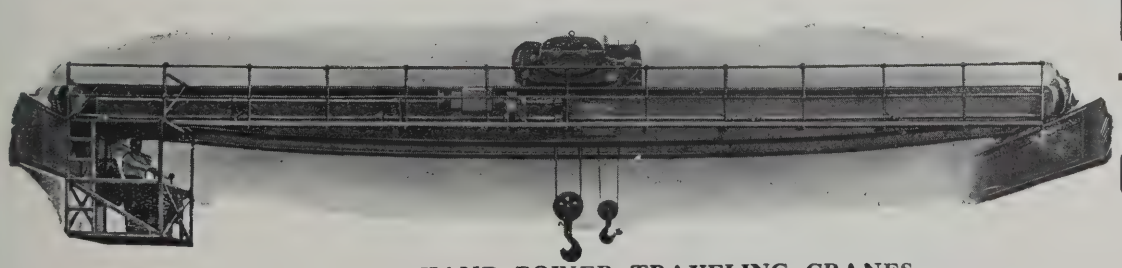
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Government merchant marine. The wooden vessels were built for French, Greek, Canadian and Norwegian interests. There were forty French ships, two Greek, three Norwegian and one Canadian. The wooden shipyards have all closed down because of lack of orders. With the end of the war the call for wooden vessels fell off, and steel shipbuilding is attracting most attention as general cargo carriers.

The steel yards of the province are all working on contracts. The Coughlan yard has two 8,100-ton Government ships to finish, expects further Government orders, and has orders for two 8,100-ton vessels from private interests. The Wallace yard is building an 800-ton ship for the Union Steamship Company, and has contracts for two 8,100-ton Government vessels. The Harbor Marine Company, Victoria, is engaged on two 8,100-ton ships for the C. G. M. M., and the Prince Rupert Drydock and Shipbuilding Company is busy on a similar contract.

Following is a table of construction during 1919:

STEEL SHIPS.

Coughlan's.

	Tons.
War Column	8,800
War Cavalry	8,800
War Company	8,800
War Chariot	8,800
Canadian Importer	8,100
Canadian Exporter	8,100
	51,400

Wallace's.

	Tons.
Canadian Volunteer	4,300
Canadian Trooper	4,300
Canadian Aviator	5,100
Canadian Raider	5,100
	18,800

WOODEN SHIPS.

Lyall's—8 French, 1,500 tons each	12,000
Northern Construction—5 French, 1,500 tons each	7,500
New Westminster—5 French, 1,500 tons each	7,500
Pacific Construction—2 French, 2 Greek	5,600
B.C. Marine—1 steamer	500
Foundation Company—20 French, 3,000 each	60,000
Cholberg—3 Norwegian	4,200
	100,300

SUMMARY.

Steel	70,200
Mainland, wood	36,100
Victoria	64,200
	170,500

All the vessels were steamers except the three built at the Cholberg yards. These were sailing ships of 1,400 tons each.

NUMBER OF CONTRACTS ON MARKET

By J. Wilkinson

Manager, Midland Shipbuilding Co., Limited, Midland

We find that the supply of labor in our part of the country is very fair, but the efficiency of the labor has not been of the highest class. The supply of raw material, which consists principally of steel, at this particular time is rather hard to get, in fact most materials are in the same category. Our cost of production during the last year has slightly decreased owing to different methods which we have introduced in our plant.

As regards future contracts, at this present time there are a number on the market but we have not secured any.

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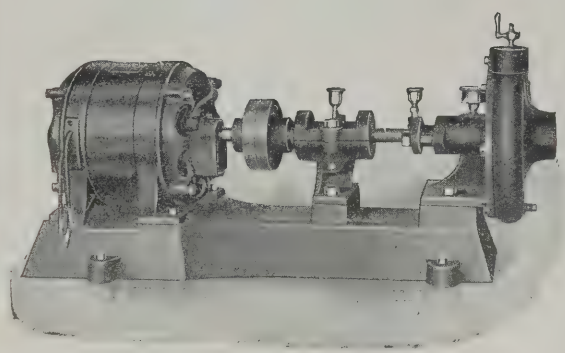
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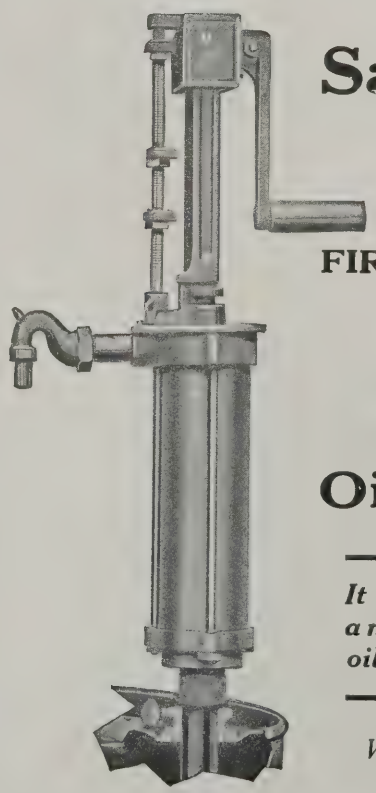
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as yet, but think that we stand a good chance. The future of the Canadian shipbuilding industry looks very well to us The factors that will assist it, in our opinion, will be co-operation from the Government and much greater co-operation from the employees, with the management of the various plants, to keep the industry going.

We have completed two ships for the Imperial Munitions Board this year, the "War Leveret" and the "War Fury." These ships are of full canal size, 265 ft. x 42 ft., 6 inches. We are now building one for private owners, The Great Lakes Transportation Company, the same size, and expect to have a contract from the Canadian Government for one of the Government vessels.

Leather Industry

(*Continued from page* 196)

before this condition can be remedied, and supplies brought back to something like normal conditions.

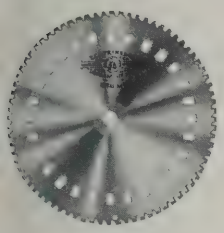
General operating conditions have been becoming somewhat easier as the year passed. Embargoes, and restrictions of all kinds, which were in force in large numbers when the year opened, have one after another been eliminated, thereby making general business easier to carry on, and essential commodities a little easier to obtain.

As to production, it is exceedingly difficult to form any definite comparison with the preceding year; but speaking generally, I believe that production has on the whole been increased during the year under review, though not to any large extent. The year opened with a somewhat quiet demand for leather because of the uncertainty following the signing of the armistice. Early in the spring European demand began to make itself felt, and increased rapidly, thereby reducing stocks of raw and finished material, and resulting in increasing prices. Coincident with the movement toward higher prices, the domestic demand for leather of all kinds increased until it had attained very large proportions. This demand has practically been maintained throughout the entire year. The export demand continued for some months, until the decline in foreign exchange rates made it difficult, if not impossible, for European customers to operate in this market, so that during the latter part of this year practically no new European business has been effected. Unquestionably there is a need for our products of leather and leather goods in Europe at the present time, and if the exchange conditions were to become more normal large demands would at once be felt.

So far as the outlook for the year 1920 is concerned, it is difficult to predict with any real certainty. Labor conditions it would seem should become easier as the year progresses. Such supplies of raw materials as are available in different parts of the world should be more easily transported, thereby making business easier to carry on.

It would appear that the domestic demand for leather and leather products is likely to be maintained for a goodly portion of the year at least, and the question as to the ability of the manufacturing capacity to meet demands will depend very largely on the possibility of export business being available. Should this come in large quantity, because of im-

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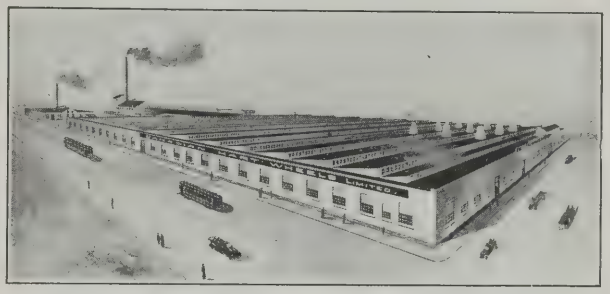
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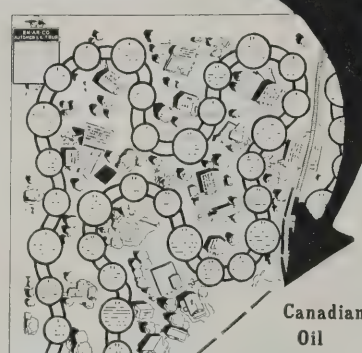
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proved financial conditions, unquestionably the capacit the industry on this continent would be taxed.

There is nothing at the moment to indicate a lower w level in price of raw materials, and in all probability value of leather and leather products will be fully n tained throughout the year.

COSTS OF PRODUCTION ARE VERY HIGH

By Beardmore & Co.

Immediately upon the cessation of hostilities, the ger impression throughout the trade was that there would fall in values in the hide markets, and that prices w gradually recede until they approached something like no conditions, and some tanners even went so far as to that, in their opinion, something in the nature of a sl would take place.

Anticipations in this direction were certainly rea in a minor degree, that is, it was possible to purchase cer raw materials at less money than had been ruling du the last year of the war; and furthermore, there wa decided falling off in the market on certain classes of ished leather.

To everyone's surprise, however, an advance in the p of hides set in during the early spring, which conti steadily until values reached a point far in excess of that had ruled during the whole of the war, leather fol ing suit, but not to such an extent, and since the sprin 1919 values have been anything from 20 per cent. to 40 cent. or 50 per cent. higher than they were at any tim the history of man. Since midsummer, however, there been a gradual falling off, but even now hides are double the price they were before the war broke out, even then the market was considered high as compared values that had been ruling up to 1914.

Notwithstanding the fact that hides have slowly decl in price since the summer, it does not necessarily fo that leather will follow suit at present, as the finished ar never reached a corresponding height, and during the that the highest figures were being paid, leather was alv being sold at less than cost of production, figuring on hides which were going through the tanneries, and which been purchased at top values. This means that hides n fall below a certain point before it will affect the ma for leather, and in any case, tanners are bound to su a loss on the leather which they had made out of h purchased during the early part of last summer.

The Canadian tanning industry is very largely depen upon imported raw material, tanning extracts and mos the hides for sole, and also skins for light leathers, b purchased from abroad, and all these have to be negoti either in New York funds or foreign exchange bought thro New York, and bearing New York exchange rate. A tan is handicapped in producing cheap leather for the dome trade, as this item has to be added to cost of production.

The exchange situation has seriously interfered with exporting of Canadian leather to Europe where a large t was done both before and during the war, as owing to low value of the pound sterling, firms on the other sid the Atlantic have to look for markets where their mo possesses greater purchasing power, and it might truthf be said that the abnormal rate of exchange has tempora paralyzed the export trade between this continent and United Kingdom.

With regard to future prospects, there is not the sligh doubt but that if the pound sterling was of higher va as compared with American currency, an enormous dem would spring up very shortly from across the water, the stocks in England and the continental countries n be very low.

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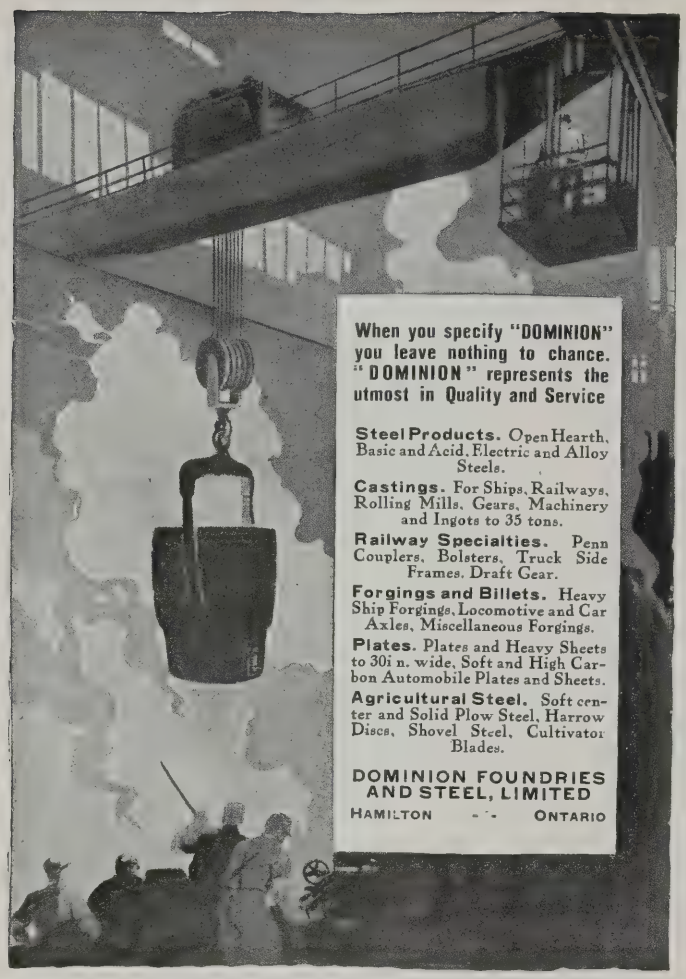


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Harness and Saddlery

HEAVY WORK HARNESS IN DEMAND

By B. F. Ackerman

President, B. F. Ackerman Son & Co., Limited, Peterborough

Our experience with regard to labor is that we are n experiencing any particular difficulty, and this also appli to raw materials. Transportation facilities seem to be abo normal, but we have of course been very much hampered making prompt deliveries to our customers, owing to rece railway regulations of shortening up the hours for the acce ance of freight and the reduced express service. Gener operating conditions are about normal. We have increas our output from a monetary standpoint, but the volun remains about the same.

We find in the saddlery business that the demand f fine products has fallen off very considerably, but for hea work harness the demand seems to be about normal. We ha had some export business, having shipped a considerab quantity of workmen's boots to London, England, but w consider this as only a temporary business which was caus by conditions in England being such that goods of this kl were almost impossible to obtain at the moment. Ordinaril we do not think we can compete with English manufacture in the manufacture of boots.

We look for an average amount of business throughou the present spring, and as a matter of fact we find rather variation in the demand for our goods. If, however, the should be a rapid decline in the price of leather, doubtle considerable business will be cancelled, but we do not antic pate anything serious in the way of loss of business from th source.

CONDITIONS HAVE BEEN CLOSE TO NORMAL

By James D. Trees

Samuel Trees & Co., Limited, Toronto

Our business, roughly speaking, is divided into three part as far as the saddlery trade is concerned. First, saddler hardware, which covers all the trimmings that are used i the manufacture of harness. For many years quite a larg part of these trimmings were brought in from Great Britai and the United States, but since the war began, owing to th conditions in these two countries, there has been practicall very little hardware brought in from either country, and th result has been that our three Canadian factories in Whitby St. Catharines, and Gananoque, have benefited by this condi tion, and have been able to adapt themselves to handl promptly and efficiently all the business that has been of fered to them.

The second division of our business is the leather indus try, which we use in the manufacture of harness and hors collars. This is entirely manufactured in Canada now, and while prices have advanced from time to time, we have ha no difficulty in getting supplies of all the leather that w have required, although at times we have had to wait fo certain special kinds.

The third division is the manufacture of horse blankets in which we use large quantities of plain hessians, striped jute cloths, and cotton ducks. During the war period we were able to get all the jute that we required from Dundee up until the end of 1917, but conditions during 1918 were very bad for getting supplies. During 1919 things have im proved very much, and we have been able to get all our supplies that we required from Dundee.

In looking back over the year, we have every reason t be thankful that conditions have been so close to normal and also to the fact that Canadian manufacturers have been able to handle two-thirds of our supplies.

We have no complaint to make in regard to labor as we have had a steady supply of skilled labor. We could hav

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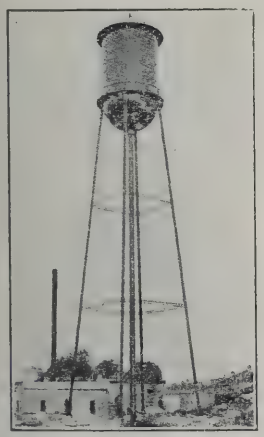
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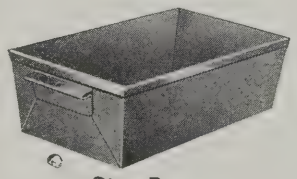
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used a few more skilled harness makers, but unfortunately there are very few men learning the trade at the present time.

Our output, generally speaking, has been normal, although our production of horse blankets has been somewhat less than usual. As far as we can see at the present time there is no weakening in the prices of any kind of commodities. Jute cloth is firmer, leather is higher, and saddlery hardware is also tending to go higher.

SADDLERY FIRM SUPPLEMENTS ITS BUSINESS

By E. F. Hutchings
President, Great West Saddlery Co., Ltd., Winnipeg

During the past year we found that labor has been very scarce. However, we have been able to produce such goods as our market required without any particular loss of business. Raw materials have also been very scarce, but in this regard we have kept going fairly well. As to transportation, we have been well served, except during the Winnipeg strike between May 15th and July 15th, when we suffered considerably during that period.

General operating conditions have been fairly satisfactory during the whole season, as none of our employees went out on strike during the big strike in Winnipeg, and they all remained loyal and true to the firm.

As to increasing our output, would say that this is very difficult for us to do, because the automobile, gasoline truck, and the gasoline motors which have been used largely by the western farmers, has been the means of cutting off considerable of our trade. The light carriage and single carriage harness is practically a thing of the past, also accessories for the light horse, but we have taken up other lines of business to make up for the loss in the above lines. Our team harness and horse collar business has largely increased during the last two years, and we have taken up automobile supplies, trunks and bags, mitts and gloves, which keeps up our volume of turnover, so that we have lost no ground, but increased a little.

Values are on the increase all the time. My own opinion is that leather goods will not get any higher, but will gradually decline. However, there is a very large demand for all kinds of leather in Europe, which will keep the prices up for some time, and we do not look forward to any sudden fall in the prices of leather or hides.

Lumbering Industry

(*Continued from page* 198)

American shipments was only fair throughout this past summer in most districts, and in some other districts a serious condition arose from lack of foreign cars to take care of lumber shipments. As regards ocean tonnage, while the Government-purchased lumber was pretty well shipped from ports on the St. Lawrence, very little was moved from ports in the Maritime Provinces, and the quantity of lumber shipped through usual channels was small owing to difficulty of securing tonnage.

Costs of operation during 1918 were very much higher than in 1917, and there will still be a further increase between 1918 and 1919. This increase is caused by wages of men in the woods and in the mills, and increased cost of provisions of all kinds.

Regarding markets, with the exception of a few months early last year, the market has been strong for all species of lumber, and I do not think you could possibly ear-mark any species as being in greater demand than another.

I fully expect that the cut of lumber during 1920 will be slightly larger than during 1919. I do not look for any new markets, and fully expect that United Kingdom, United

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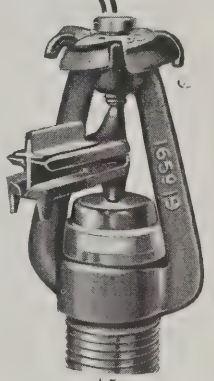
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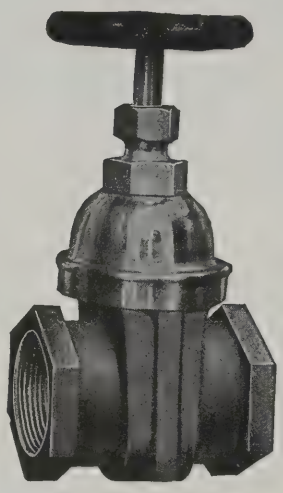
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MONTREAL - CANADA

States, and our local market will take all the lumber th will be produced. I do not think that there will be any mo mills operating in 1920 than in the past year.

MUCH DEPENDS ON THE BRITISH ADMIRALTY

By W. B. Snowball
President, J. B. Snowball Co., Limited, Chatham, N.B.

Production for 1918 was slightly in advance of 1917 and considerable improvement over previous years, and judging b the Crown Lands Reports we would say equal to the winter 1913-14. This has been brought about to a large extent by th high prices available for lumber, which induced the owners private-owned lands, which they had been holding for a nun ber of years, to cut these, putting the lumber on the marke

Labor was more plentiful than in 1917 and more efficien but yet not as efficient as previous to the war and very res less, and not as desirous of being every day on the job as the were when wages were lower, which is a disadvantage in th manufacturing industry.

The larger portion of the manufactured stock in the Mar time Provinces was sold to the British Admiralty, sales havin been made from January to March of last year. This too out of the market such a large portion of the output that made the domestic market very strong and also stock require for U.S. market brought good prices. The demand was largel for 1 inch and 2 inch. The present outlook in the U.S. ma ket and also the domestic is good, but this will be somewha governed by what takes place in Great Britain. What actio the British Admiralty will take in regard to the large stock they are holding in England, and Canada will be a facto for the future, and an uncertain one. Until this policy decided upon, we do not look for any large transactions t take place, the same as they have in previous years. Th condition of British exchange is also having an effect on th British market, to which we look for 75 per cent. of th output from the Maritime Provinces.

The saw-milling capacity is fully equal, if not beyond th natural growth and production of the Province, and if an enlargement is made on what at present exists, it will mea a reduction in the timber assets of the Province.

CONDITIONS IN NORTHERN NEW BRUNSWICK

By Angus McLean
Bathurst Lumber Co., Limited, Bathurst, N.B.

The cut for this locality, I would consider, would b about 60 per cent. of pre-war production, and runs a littl bit lower than 1918 production, which, I would judge, woul run about 65 per cent. or 66 per cent. of pre-war days.

As to the supply and efficiency of labor, I would say tha we have suffered for want of labor during the entire season and what labor we had was more or less inefficient, an there was always during the entire season more or les unrest and dissatisfaction, men seemingly not knowing wha to do with themselves. Cost of operation was fully 15 pe cent. higher than 1918, and about double pre-war days.

During the early part of the year the lumber market wa quiet, both for domestic and export, but about midsumme the demand for domestic and for the United States market became very active, and from that time up until the presen we have had a very strong demand for all kinds of lumber spruce being a ready seller and pine exceptionally strong.

The outlook for next year's market is exceptionally goo and prices tend to a higher level, as there as there is reall a shortage of lumber in almost all districts to-day. W anticipate our best demands from the Uniteed States market and also a good demand from the Canadian market. We ca not say that we consider the demand from Europe wil amount to very much, owing to the fact that the rate o exchange is so much against us that we are unable to sel to Great Britain or the continent.



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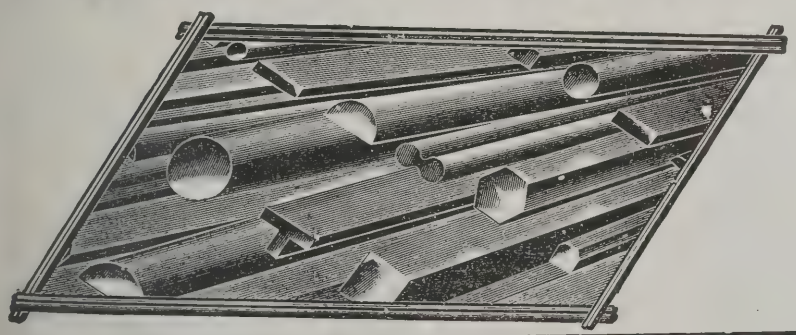
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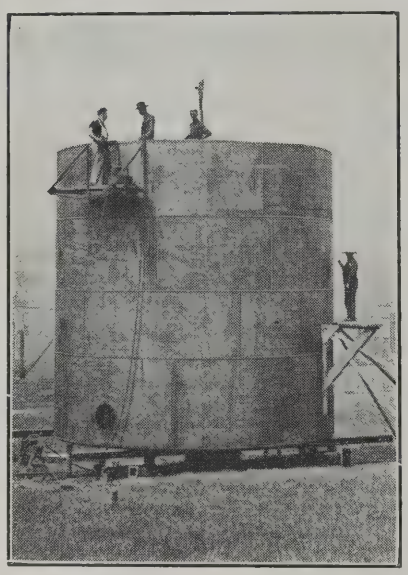
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Machinery and Metal

(*Continued from page* 179)

several years past. These consist not only of heating a ventilating apparatus, but apply to our blacksmiths', for and blower line as well. We have a great deal of this bu ness going to the West, in fact more than for several yea past. We have also just made arrangements for handli our line in South Africa, Australia, and New York, whe we already have considerable business, and are pleased advise that we are receiving a great many export orde particularly from South African territory.

We figure that business will be good for a number months to come, with a tendency to a still further increa in price, due principally to the scarcity of raw material, a high prices which are being paid for same.

MACHINERY VALUES UP 100 PER CENT.

By F. Smith
The E. Long Manufacturing Co., Limited, Orillia

As regards the matter of labor supply we have found th common labor is easy to secure, but mechanics, such machinists and pattern makers and moulders, are very ha to secure. As regards raw materials, it has been our e perience, in the last six months, that raw materials are n made in all sizes. We have found it necessary to ta delivery of certain sizes of material, which means considera labor and cost to change into the proper material require The condition exists more in regard to sizes of steel ba plates and angles. Up to the present we have not increas our output since the armistice was signed, over and abo what our output was before the war.

With regard to marketing conditions, we find the dema at the present time to be good and we are able to sell the machinery we can manufacture at a fair price, the valu of course being nearly 100 per cent. higher than they former were before the war. In regard to export, this firm h never exported any machinery.

As to the outlook for the next six months to one yea We are manufacturing saw-mill machinery and some mini machinery. We believe that the outlook is good and that w can manufacture all the machinery we can make and wi have very little trouble in disposing of same at a reasona profit. We are expecting to increase our production co siderably within the next few months.

FAIR DEMAND FOR MACHINERY

By C. H. Waterous
Manager, The Waterous Engine Works Co., Limited, Brantford

Manufacturing conditions have been somewhat unusu for the past year—labor has not been any too plentiful, an as generally known, has been restless. However, in th

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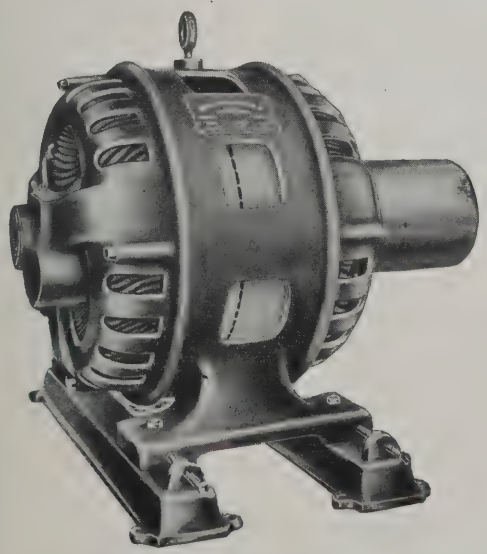
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respect I think there is an improvement. Raw materials in most instances have been scarce and difficult to procure. The steel strike, naturally, accentuated this condition in the steel market. The coal strike has added somewhat to that. However, both these strikes appear to be pretty well settled now, and we should begin to get reasonably prompt deliveries. Transportation conditions have been unusually unsatisfactory, due to the shortage of cars, motive power, and the apparent lessened interest of those employed on the railroads —in their work. This is a very universal complaint, and from our experience it seems to be true.

We find there is a very fair demand for the machinery we manufacture, principally in the way of replacing obsolete and worn-out machines, not much replacement having been done during the period of the war. This refers particularly to sawmill machinery. Pulp mill machinery has been in good demand, owing to the very great demand for paper.

The outlook, so far as we can tell for the next few months, will practically be the same as for the past six months. We can hardly look for very much change in a shorter time than this. Things are apparently righting themselves, and it should not be very long before a more definite and distinct appreciation of the future can be made.

We have not done anything towards increasing our capacity, and it will depend on what the next few months will produce. Just now we are not contemplating anything of this kind.

WOODWORKING MACHINERY PLANT WORKS OVERTIME

By G. W. Robinson
Secretary P. B. Yates Machine Co., Limited, Hamilton

There is an extreme shortage of labor, and conditions will be worse, we believe, as we enter into the new year. In respect of raw materials, the situation is bad in all lines. We are reliably informed that companies in the United States are making inquiries in Canada for steel in certain sizes, which they are unable to obtain in their own country. As to general operating conditions, we are working overtime, paying time-and-a-half for such time, and will continue so for some period. We have increased our output, and will continue to do so.

There was never the demand that there is to-day, both as to amounts and kinds, and the trend of values is upward. There have been large developments in the export field, and this business is in volume, in spite of the exchange. Unless there is a sudden collapse, which we are unable to foresee at the present moment, business during 1920, we believe, will be of a volume heretofore unheard of.

Our present plant is capable of larger output; with us, it is a question entirely of the possibilities of obtaining a sufficient amount of labor. We are not adding new lines, but rather, to answer the questions specifically, continually bringing out new and improved types in the line of woodworking machines that we do build.

OPERATIONS DEPEND ON COAL SUPPLY

By C. A. Collins
Second Vice-President, Canadian Furnace Co., Ltd., Port Colborne.

We would report that manufacturing conditions with us are normal as regards labor and raw materials. We have been troubled by shortage of cars for shipment of our product, and while we have been able thus far to operate with the fuel we had in stock, our future operations are entirely dependent upon the disposition of the coal strike and the resumption of normal shipments of fuel.

The demand for our product is good, both domestic and foreign. The trend of values is upward. We consider the outlook favorable for active business during the next few months. The only factors which might have an adverse effect seem to be the fuel and transportation situation.

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253. Wood Separators for Storage Batteries.—A Canadian firm is desirous of getting in touch with Canadian manufacturers of wood separators for storage batteries.

Foreign.

254. Wall Paper Hangings, Paint and Mill Brushes.—A Lancashire firm manufacturing paints, etc., and dealing in builders' supplies, would like to get into touch with Canadian manufacturers of wallpaper hangings; and also of painting brushes, brushes on cards and in boxes, and all descriptions of mill brushes.
255. Wire.—A Newcastle firm ask for quotations on all grades of wire suitable for rope-making purposes.
256. Wire.—A Sheffield firm is in the market for mill-drawn wire, 16-gauge galvanized iron wire, 6 to 19 gauge, annealed galvanized wire, 17 to 22 gauge, and annealed iron wire, 12 to 21 gauge.
257. Wire.—A Halifax firm asks to be placed in touch with exporters of Canadian mild steel wire, No. 25,020 Bright or annealed in 8 in. coils.
258. Furniture.—A Leeds firm are interested in offers of general domestic furniture.
259. Shop Chairs.—A Leeds firm are interested in offers of the above.
260. Mica.—A Preston firm who had been large importers of Canadian mica for some years are interested in offers of the above.
261. Household Furniture.—A Leeds firm ask to be placed in touch with exporters of the above.
262. Mica.—A Yorkshire firm ask to be placed in touch with exporters of the above.
263. Maple Roller Blocks.—A Keighley firm wish to get into touch with exporters of the above, with a view to next season's business.
264. Tinned Mattress Wire.—A Glasgow firm ask for quotations on five-ton lots of the above 22½ W.G.
265. Bobbin Wood Squares.—A Belfast firm ask to be placed in touch with exporters of birch and beech squares, 1½ x 2½ in., suitable for the manufacture of bobbins.
266. K. D. Oak Bedsteads.—An Edinburgh firm ask to be placed in touch with exporters of the above.
267. Chairs.—A Glasgow firm ask to be placed in touch with exporters of dining, kitchen and bedroom chairs.
268. Haberdashery and Smallwares, etc.—A London firm of manufacturers' agents wishes to secure the representation of Canadian manufacturers of haberdashery and smallwares, notably hooks and eyes, press studs, pins and elastic.
269. Poland, Jugo-Slavia and Ukrania.—A consulting engineer, who has lived in Canada for over fifteen years, and who speaks Polish and Serbo-Croatian correctly, desires to get into communication with Canadian manufacturers who wish to extend their trade into the new states of Poland, Jugo-Slavia and Ukrania. He has good connections in these countries, and a first-hand knowledge of the people and their needs.
270. Freight and Transport Contractors.—A Canadian concern, having offices all over the United Kingdom and in other parts of the world, is in a position to render valuable assistance to Canadian exporters with regard to their shipments. They are in a position to handle bulk or package freight of all classes, undertaking arranging of steamer space, forwarding, custom entries, insurance, etc. They can handle freight to or from any part of the world. They desire the opportunity of demonstrating the value of their service to Canadian manufacturers.
271. Condensed Milk.—A London firm desire to get into touch with Canadian suppliers of condensed milk, salmon and other fish, fruit and foodstuffs generally.
272. Tungsten.—A London firm invite quotations from Canadian producers of Tungsten.
273. Molybdenum and Tungsten.—A London company ask for the addresses of Canadian producers of Molybdenum and Tungsten.
274. Canned Corned Beef.—The London agency of a Moscow firm trading throughout Russia and Siberia ask for the addresses of Canadian producers of Canned Corned Beef.
275. Dry Goods and other Lines.—A firm in Santo Domingo, Dominican Republic, who already represent United Kingdom firms, is desirous of securing the agency of Canadian manufacturers of dry goods and other lines. Canadian bank reference available.
276. Dowels.—A London office of a Canadian manufacturing enterprise is in a position to place an order for large quantities of dowels, and is desirous of hearing from Canadian manufacturers able to offer supplies.
277. France.—A firm in Paris desire to get into communication with Canadian suppliers of steel and metal of all kinds.
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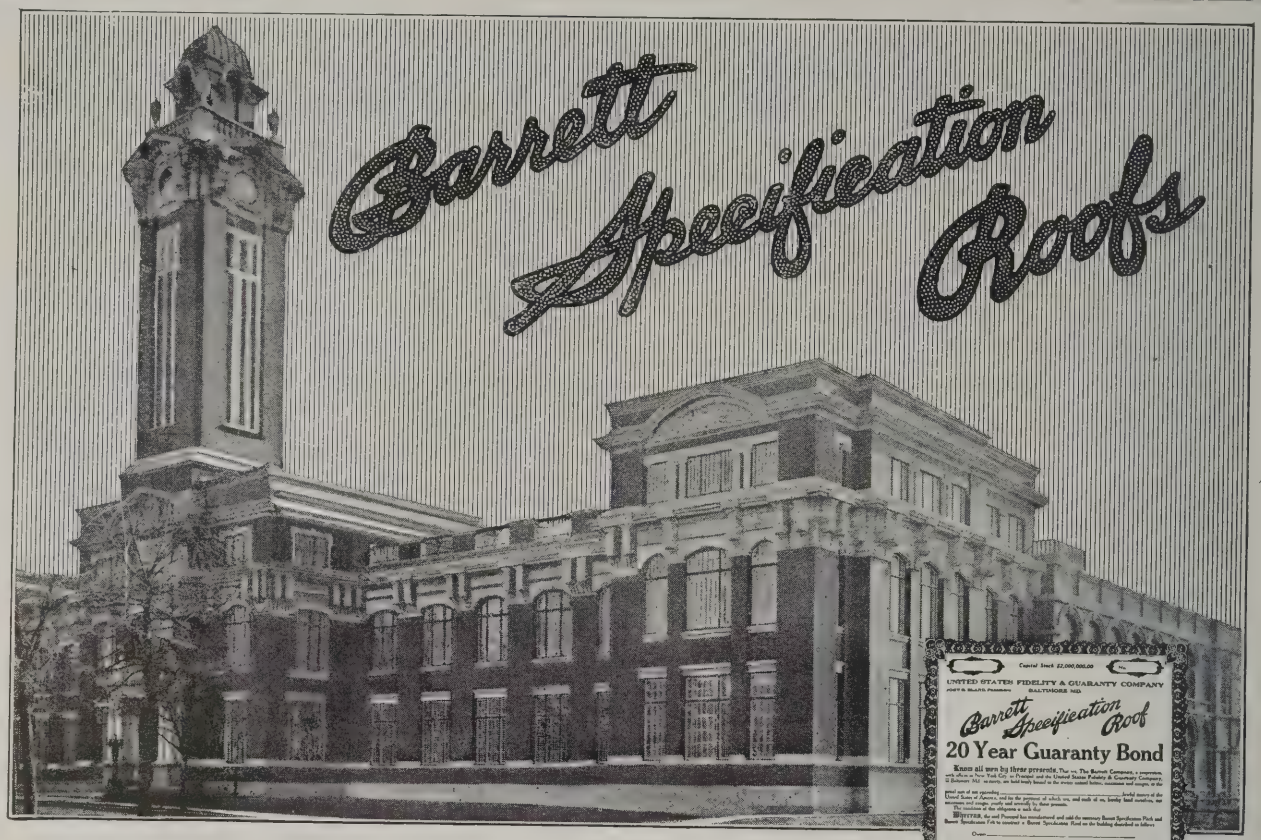
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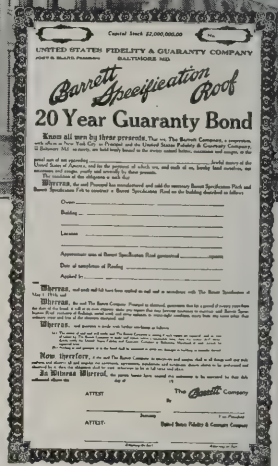
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Editorial Comment

The Annual Meeting

AS announced some time ago, the 1920 annual meeting of the Association will be held in Vancouver on June 8 and 9. While the date is still four months distant, conditions render it desirable that members in Eastern Canada should make their arrangements to be present well in advance of the actual time of meeting. It will take several days to make the trip, and members will of necessity be absent from their offices for a much longer period than would be the case were the meeting to be held in the east. This makes it all the more important that early plans should be laid for attendance.

The value of a visit to Western Canada and the Pacific Coast at the present time need scarcely be emphasized. Many eastern manufacturers have not had an opportunity to visit the west since before the war, and in the interval important changes have taken place. Moreover it is highly desirable that through personal contact, the best of relations should be established between east and west. The more members who can take the trip to Vancouver and Victoria in June the better.

Resignation of Mr. Ellis

WIDESPREAD regret will be felt among the membership of the Association at the announcement that Mr. J. F. Ellis has found it necessary for reasons of health to resign from the office of treasurer. Only those who have been in close touch with Mr. Ellis are aware of the wide and varied extent of his activities, and it is by no means surprising that, with advancing years, he should now find it necessary to reduce his responsibilities.

The Association has had no more zealous and loyal supporter than John F. Ellis. It is now many years since he served as president, but both before and after occupying that high office he has given steadily of his time and service to the welfare of the organization. He leaves the treasurership with the esteem and admiration of those with whom he worked, while the wish is general that he may long be spared to continue his connection with the Association in some less arduous position.

Precept and Practice

A MEMBER of the Association has written to us in connection with the Made-in-Canada Campaign, enclosing six envelopes received by him from six different Canadian manufacturers. All these envelopes were made in the United States. Our correspondent says:—

"The thought that arises in my mind is—Do Canadian manufacturers practice what they preach? Of course the heads of some of the firms in question might say that these matters are too small for them to bother about, but I do not think it should be. If Canadian firms would watch these small matters it would mean the employment of several thousand more of our people making just such things as envelopes."

The Fuel Situation.

APPOINTMENT by the Association of a special committee to investigate and report on the fuel situation in Canada, with a view to developing domestic sources of supply, is a step that must receive the cordial endorsation of all who are interested in the national welfare. It is to be hoped that no time will be lost in getting down to action, and that the results of the inquiry will be such as to lead to a satisfactory solution of the whole problem.

In a sense it has been paradoxical that the Dominion, with its immense coal areas, should have become so dependent on the coal mines of Pennsylvania and Ohio for its supply of fuel. Yet after all the element of transportation has hitherto been the determining factor, and it has been more economical to deliver coal from the United States to Ontario and Quebec than to haul it from Nova Scotia or Alberta.

The need for action at the present time rests not so much on any difficulties that may arise in connection with transportation as in the ultimate exhaustion of the source of supply. Canada has already experienced a foretaste of what may occur, when the American miners went on strike last fall, and this condition will become accentuated as

reserves dwindle. Eventually, with its own needs steadily on the increase, it may become necessary for the United States, in self-defence, to take steps to conserve its supply by restricting exports. And this action could reasonably be taken against Canada because of the Dominion's own abundant fuel resources.

From whatever angle the question is viewed, it is most desirable that this country should become much more self-contained as regards its fuel supply than it has been in the past, and any effective solution of the difficulties which have hitherto prevented a wider use of Canadian coal will constitute national service of the highest order.

Water-Powers of British Columbia

THAT 3,000,000 horse-power may be furnished by the waters of British Columbia, is stated in the recently published report of the Commission of Conservation on "Water-powers of British Columbia." This estimate is in round figures and is made on the basis of 24-hour horse-power.

Water-power is becoming increasingly valuable to any province which hopes for an industrial future. This fact is emphasized by the recent coal crisis. The great volume of water-power available gives some indication of the industrial growth which should be associated with the future of British Columbia. The Commission states that its total estimate includes "about 250,000 horse-power for plants already in operation." It would appear, therefore, that British Columbia is scarcely using one-twelfth of the water-power available within the boundaries of the Province. The estimate of the Commission would seem to have been reached after very conservative allowances had been made to prevent uneconomic development of water-power. The report points out that water should not be allotted for power development without due recognition of the just demands of other interests having claims upon inland waters. Care should be taken to conserve vegetation. Nothing should be done to deplete the ground water storage. No hydro-electric development should tend to decrease the supply of water available for irrigation. Neither should hydro-electric development be undertaken at the expense of the requirements of navigation. The salmon industry must not be injured. The pollution of inland waters through the deposit of mining, factory and industrial waste must not be permitted. The report recommends that no power development should interfere unduly with the tourist traffic. After eliminating all possibility of developing latent power where it might interfere in any of the ways specified above, the Commission's estimate that 3,000,000 horse-power is available for hydro-electric developement is probably most conservative.

The report dwells upon the importance of the development of hydro-electric power to the mining industry of British Columbia, and prophesies a bright future for it through the application of hydro-electric energy. With abundance of raw materials and hydro-electric power, there should be splendid prospects for a great development in manufacturing in British Columbia.

The Dislocation of Exchange.

MORE emphatically than ever the course of foreign exchange is demonstrating the paramount importance of developing the home market. While the situation is complicated by the play of international forces, and while the movement of securities from one market to another introduces a qualifying influence, basically it is the interchange of commodities in unequal proportions that is causing the dislocation. As between Canada and the United States, the Dominion has been buying far in excess of its sales, and there has been no means of adjusting the balance through a third party as in the days before the war.

Abnormal exchange rates are bound to force the adoption of remedial measures, though it may take some time to make them effective. The connections of years are not readily severed. At the same time there is an increasing disposition to look to the home market for goods that were hitherto bought from the United States, and, failing that, a tendency to try out the British market. By degrees these influences are sure to have an effect on the course of trade.

In his address before the Hamilton branch last month, Mr. T. B. Macaulay, president of the Sun Life Assurance Co., based his appeal for closer trade relations with the British West Indies on considerations into which the question of exchange entered prominently. Canada, he argued, is a northern country, and as such must be an importer of tropical products. The United States, on the other hand, develops within its limits both the products of temperate and tropical climes, and in that respect is self-contained. If Canada persists in buying from her southern neighbor the bulk of the goods which she cannot herself produce, it stands to reason that the exchange rate must remain against her, but, if she could do her buying in the West Indies and reduce importation of tropical products from the United States, then at least one influence towards adverse exchange would be removed.

At present the soaring premium on New York funds and the break in sterling are becoming rather the effect of a psychological condition than a reasonable scientific movement, and nothing will tend to bring quotations back to a more normal basis than knowledge that the current of trade is setting strongly in the direction of improvement. Trade figures will be watched with intense interest during the next few months. And anything that can be done to show that we are importing less and exporting more will have a beneficial effect.

Fire Prevention

THE loss by fire in Canada during the year 1918, excluding forest fires, is estimated at $33,000,000.

The fisheries of Canada yield annually about $35,000,000, the gold mines about $15,000,000, the silver mines about $18,000,000, the nickel mines, $25,000,000, and the coal mines, $47,000,000.

These figures enable us to grasp the economic significance of fire waste. The loss from fire is of as much importance, economically and intrinsically, as would be the entire destruction of our fishing industry, or the closing of our gold and silver mines, and nearly as great as the disappearance of our coal industry.

Were these latter industries to cease, the public would be appalled at the magnitude of the disaster. The fire loss, on the other hand, is, or until recently has been, regarded with comparative equanimity. Why?

The reason is to be found in the fact that indemnity for the individual loss is, as a rule, provided for by insurance. The public has not always stopped to consider that no indemnity is or can be provided for the national loss. The individual is indemnified by other individuals within the nation. The nation as a whole is the loser as truly as if it were deprived of its productive industries.

It was these facts that led the Department of Insurance, with the sanction of the Minister of Finance, to call together in December 1918 representatives of various business organizations with a view to considering the best means of dealing with the problem. Many of these organizations had already seriously studied the situation and it was felt that their experience, together with that of the fire insurance companies, would be valuable as a guide to action.

The organizations represented on that Committee were The Canadian Bankers Association, The Canadian Credit Men's Trust Association, The Canadian Fire Underwriters' Association, The Canadian Manufacturers Association, The Dominion Association of Fire Chiefs, The Dominion Mortgage and Investments Association, The Trades and Labour Congress of Canada, The Non-tariff Insurance Companies, The Retail Merchants' Association of Canada, The United Farmers of Alberta, The United Farmers of Ontario, The Commission of Conservation and the Department of Insurance.

Many resolutions were adopted, of which the most important were those favouring a Dominion-wide campaign in the interests of fire prevention, the enactment of legislation imposing criminal penalties for negligence in causing fires, and the compulsory installation of automatic sprinklers in large buildings.

The first-mentioned resolution has been given effect to throughout the year by propaganda of various kinds, and more recently by co-operation with the Provincial authorities in securing the widespread observance of Fire Prevention Day.

The second resolution has been carried out by the amendment of the Criminal Code respecting the prevention of fire.

The third resolution is the one which is fraught with the greatest possibilities for immediate results in reducing fire waste. The resolution, moved by Mr. J. B. Laidlaw, of The Canadian Fire Underwriters' Association, and seconded by Mr. John Appleton, of The Dominion Mortgage and Investments Association, recognizes the efficiency of the modern automatic sprinklers, the greater security obtained by their use for owners of property and mortgagees, and the large reduction in insurance premiums resulting from their use.

In dealing with this resolution, the Department has taken the view that for the present at least compulsory measures are not necessary, but that where pecuniary advantage is joined with an opportunity for conserving the national resources, which at the present time must be regarded as one of the highest forms of patriotism, it should be necessary only to bring more prominently than heretofore to the attention of manufacturers and others the merits of this installation to attain the object of the resolution.

A survey of manufacturing plants now being made reveals a large number of plants, apparently well suited for sprinkling, which have not been so protected. In some cases the owner has probably not had his attention drawn to the advantages to be derived, in others he has doubtless been deterred by the present comparatively high cost of the equipment.

The cost of installation has undoubtedly advanced in recent years but the causes which have produced this advance have also increased the value of the buildings and stocks to be protected and consequently the amount of insurance to be carried, and as the financial advantage from sprinkling is proportional to the amount of insurance carried, the cost of the installation is relatively in many cases the same as before.

An important element of the cost of installation is the overhead expense of the sprinkler companies, each of which is called upon to make expensive surveys, plans and specifications from which no contracts are received. Frequently several companies incur this expense in respect of a single plant without result.

This suggests one means of reducing the cost of installation and one which is being tested at the present time. That is the possibility of having the installing companies co-operate through a central survey bureau in making surveys and plans, thus eliminating the duplication of work and expense which has so materially affected the cost in the past.

An arrangement of this kind was effected in the United States during the latter part of the war and was found to be advantageous. While conditions are now changed, there should be no reason why a similar arrangement should not be practicable in Canada.

A great opportunity confronts the manufacturing and mercantile interests in Canada of wiping out the stigma at present attaching to this country in the matter of waste from fire. This opportunity is presented through the automatic sprinkler.

News and Views of the Association

There will be found each month in this department a record of the various activities of the Canadian Manufacturers Association during the preceding month. The information is supplied to INDUSTRIAL CANADA officially, and all members of the Association are urged to acquire the habit of reading and checking over the contents of the department carefully in order to keep themselves posted on the work of the Association

Resignation of Treasurer

Owing to ill-health, Mr. John Ellis, Treasurer of the Association, has resigned. At the January meeting of the Executive Council, the following resolution was passed:

"WHERAS Mr. John F. Ellis, Treasurer of the Association, has been obliged to relinquish his office, owing to ill-health;

"AND WHEREAS he is one of the oldest members of the Association and has served its members faithfully as President, member of Council, and on numerous important committees;

"AND WHEREAS in the discharge of his official duties his kindness, integrity and ability have endeared him to all members of the Association;

"THEREFORE BE IT RESOLVED that the Executive Council of the Canadian Manufacturers' Association, assembled in Hamilton, January 20th, 1920, desire to express their profound regret that he has been forced to limit his activities in the Association; to hope that his health will be speedily restored; and to thank him on behalf of the entire membership for the long and faithful services that he has freely given to the promotion of the welfare of the manufacturers of this country."

The Council appointed a special sub-committee, composed of the president, vice-president, and general manager, with full power to act in selecting a treasurer who will act until the next annual meeting.

Board of Commerce

Reporting to the January meeting of the Executive Council, the Executive Committee referred as follows to the appeal of the Board of Commerce as to its jurisdiction:—

"The Board of Commerce, acting under the Combines and Fair Prices Act and the Board of Commerce Act, 1919, having made various orders with a view to prohibiting the taking of alleged unfair profits on sales of commodities within the statutory definition of the necessaries of life, and having in contemplation the making of other orders with the same object, have filed a stated case for consideration of the Supreme Court of Canada, to determine various questions of law and jurisdiction which have arisen before the Board, and which, in the opinion of the Board, should be solved before the Board proceeds in matters now before them, and to exercise the powers which are stated to be vested in it.

"The Board served copies of the stated case on the following persons and associations interested in the subjects of its reference:

The Canadian Manufacturers' Association.
The Retail Merchants' Association of Canada.
The Canadian Credit Men's Association.
The Crescent Creamery Co., Limited, Winnipeg.
The Toronto City Dairy Co., Limited.
The Toronto Milk and Cream Producers' Association.
The Industrial and Development Council of Canadian Meat Packers.

"The motion of the Board of Commerce to file a stated case came before Mr. Justice Idington, at Ottawa, on January 19th, who declined to deal with the matter, and expressed the opinion that the Court had no jurisdiction, but said that at any rate the application should not be to him as a single judge, but to the full Court. The Board of Commerce have accordingly inscribed a motion for hearing before the full Court on the 3rd February.

"Your Committee beg to report that Mr. W. N. Tilley, K.C., has been instructed to represent the Association."

Group Life Insurance

In accordance with the instructions issued at the last meeting of the Executive Council, a circular was issued to members of the Association informing them that facilities had been provided by the Dominion Government for the transaction of group life insurance in Canada, and giving all available information in regard to this type of insurance. It will be recalled that representations were first made by the Insurance Department through the Association to the Dominion Government in 1917 at the request of some of our own members, asking that the Insurance Act should be amended in order to provide for the transaction of group life insurance in Canada. The Insurance Department reports that our members are taking considerable interest in the subject, and that numerous inquiries have been received for further information.

Service of the Insurance Department

The following are the various points on which the Insurance Department was consulted during December, 1919, the figures representing the number of inquiries under each subject: Standing of companies, 3; policy wordings, 6; automobile insurance, 1; workmen's compensation, 1; marine insurance, 1; group insurance, 9; fire marshal's tax, 1; rates, 7; building construction, 3; automatic construction, 1; co-insurance clause, 3; inspection service, 6.

Judge Masten's Report

Following the approval of the Insurance Committee's recommendations in regard to Judge Masten's report at the last meeting of Council, a deputation of members of the Association interviewed the Ontario Cabinet in Toronto on January 7th, 1920. The committee pointed out to the Cabinet that this report of Mr. Justice Masten was compiled after a long and expensive investigation and that it advocated extensive changes in the method of transacting life insurance in the Province of Ontario. Attention was drawn to the fact that the special committee which had been appointed under the previous Government to frame legislation on this report had been dissolved with the defeat of the Government. It was suggested that a special committee of the present Legislature should be appointed at the approaching session to bring in necessary legislation arising out of this report. Attention was also drawn to the more important recommendations made by Mr. Justice Masten. In reply to the deputation, the Attorney-General, with the approval of the Premier, promised that the committee would be appointed during the

session, but he doubted that legislation would be brought down this year. When the committee of the Legislature is named, your committee will take the necessary steps to bring to their attention those sections of the report in which the Association is specially interested.

Graphic Exhibits of Canadian Industries

The Commercial Intelligence Committee have had the subject of graphic exhibits of Canadian industries under consideration for the past three months. It is becoming more and more evident that much more must be done in Canada to acquaint the Canadian public with the scope and character of Canadian manufacturing enterprise. It has long been recognized that visual observation is much to be preferred as a means of education to the printed word, and in this case it has the advantage of being much more permanent and, if exhibits are procured, they are placed before the public in its most receptive mood. Many of the goods are, to an ordinary spectator, somewhat uninteresting, but, when placed in bird's-eye view order, can be made both attractive and stimulating. In considering the goods that might form such exhibits no thought has been entertained of including such goods as are now exhibited in the rented booths and spaces or to interfere in any way with an individual's right to exploit his own product under his own name, except in so far as it may be necessary to include an odd line or article to complete some cycle of exhibits. As indicated above, the idea is to get exhibits of various allied products shown either actually or by photograph and descriptions or photographs of processes arranged in the order in which the process takes place. In many exhibitions, buildings have already been provided that are now suitably housing exhibits of a similar national character. The Commercial Intelligence Committee is impressed with the importance of this phase of publicity work, inasmuch as it can be efficiently handled in comparatively small space without interfering in any way with the revenues of Exhibition Associations, and recommends that the suggestion be passed on to the various sections of the Association, and, where sections do not exist, to groups or individual manufacturers for their information.

U.S. Foreign Trade Convention

Through the Department of Trade and Commerce an invitation has been forwarded by the authorities in charge of the Annual Foreign Trade Convention to be held in San Francisco on May 12-15 to suggest the names of representative delegates to attend this Conference. The Commercial Intelligence Committee proposes to put full information before the members to ascertain the amount of interest in the proposal. It will then be in a position to co-operate with the Department of Trade and Commerce in the matter.

Telegraph Rates

Reporting to the Executive Council at its January meeting, the Transportation Committee dealt with the question of increased telegraph tolls, as follows:—

"A careful analysis of the exhibits filed with the Board of Railway Commissioners by the G.N.W. Telegraph Company, has been made, from which it is quite apparent that the telegraph companies must have a considerable increase to take care of the enhanced costs of labor and material.

"There has been some doubt as to whether an increase could be granted without annuling the legislation of 1887, which fixed the maximum rate in Ontario and Quebec at 25 cents for ten words; but it would appear that the Board of Railway Commissioners have the power, under section 325 of the Railway Act, to grant an increase—despite any existing Act of Parliament to the contrary. However, this question will no doubt be dealt with by the Board at the final hearing in Ottawa on the application.

"Under the proposal submitted by the telegraph companies the Dominion will be divided into zones, showing an approximate average increase over the whole country of 32 per cent. It was the opinion of your Committee that fair and equitable rates would have to be considered between commercial centres and that this phase of the situation should be watched. However, after further discussion, it was decided to leave the matter entirely in the hands of the Association's representatives who will be present at the final hearing in Ottawa."

Hydro Electric Shortage in Ontario

At a meeting of the Ontario Division Executive, held in Hamilton on January 28th, 1920, a special report by the Transportation and Power Committee was submitted. It was stated that in pursuance to a resolution of the Executive, circulars and questionnaires had been issued to all the manufacturers in the Province of Ontario, requesting them to furnish information regarding the power service supplied to their plants. Many industries complained of numerous

January Circulars

Eight circulars were issued to members during the month of January, summaries of which are given below. The Association's bulletin service is now reaching considerable proportions and form an important part of the work of the organization. Members are urged not only to read the circulars carefully as they are received, but to arrange for their fyling in such a way that they can be referred to readily at need. By checking over the following list it will be seen whether any of the month's issues have failed to reach their destination.

No. 234, Jan. 4.—Circular re Export Trade issued by the Commercial Intelligence Department. This circular pointed out the desirability of stipulating that quotations be made in terms of Canadian dollar values and payment received in Canadian funds. It showed that the pound sterling is worth more in Canada than in the United States and that, accordingly, customers in Great Britain do not need to use as much sterling to settle for Canadian commodities if payment is made direct from Great Britain to Canada.

No. 235, Jan. 14.—Circular re proposed Supplement No. 13 to Canadian Classification No. 16, issued by the Transportation Department. This circular gave the new regulation with respect to long and bulky articles as substituted by the Canadian Freight Association for the present Rule 6. What was involved in the charge was explained and members were invited to advise whether the new regulation would cause any hardship.

No. 236, Jan. 28.—Circular re "Made-in-Canada," issued by the Executive Council. In this circular there was outlined what had been accomplished during the past year in intensifying the "Made-in-Canada" campaign, which the Association had carried on for some years. This included a summary of work done by the Canadian Reconstruction Association. The circular concluded with a number of suggestions as to what individual manufacturers could do to help on the campaign.

No. 237, Jan. 30.—Circular re Ontario Workmen's Compensation Act issued by Ontario Division. This circular invited members to express their views on the working of the act preparatory to the holding of a meeting of the Division for its consideration.

—— Jan. 21.—Circular re Statistics Act, 1918, issued by the Legal Department. This circular called attention to the necessity of making the annual returns to the Dominion Bureau of Statistics in the census of industry, explained what was required, and urged manufacturers to see that returns were made.

—— Jan. 30.—Circular re Special Canadian Products Number of "Industrial Canada," urging members to give the preference in buying to firms advertising in this number.

—— Jan. 14.—Circular issued by Ontario Division announcing meeting of Executive Council in Hamilton on Jan. 28, and luncheon address by Mr. T. B. Macaulay, president of the Sun Life Assurance Co., on "Closer Trade Relation with the West Indies."

—— Jan. 20.—Circular issued by Toronto Branch, announcing special meeting on Jan. 29th to hear Mr. Thomas Mulvey, K.C., Under-Secretary of State for Canada on "Blue Sky Laws."

shut-downs for various reasons, causing serious changes of manufacturing methods and general inconvenience as well as adding proportionately to the users' cost of power. In some instances, members suggested that if there are to be further restrictions of power, the more essential industries should be favored. The obvious deduction to be drawn from the inquiry of the committee is that the Hydro-Electric Power Commission has accepted contracts to supply electrical energy in excess of production.

The Executive Committee resolved that a delegation, representative of the Ontario industries, should be organized to wait upon the Hydro-Electric Power Commission at an early date for a general discussion of the whole question of electrical energy in Ontario.

Ontario Workmen's Compensation

At a meeting of the Executive Council, held in Hamilton on January 28th, 1920, the Legislation Committee of the Ontario Division was directed to issue a circular to the members in the province, inviting particulars as to their experience of the operation of the Ontario Workmen's Compensation Act, either generally or as it affects individual plants. When the information is compiled, a memorandum will be submitted to the Provincial Cabinet, suggesting desirable amendments of the Act.

The Embargo on Mechanics

Attention of members is drawn to Order-in-Council, No. P.C. 2499, passed on 24th December, which lays an embargo on the entrance into Canada of immigrant mechanics, artisans and laborers, skilled or unskilled, unless they possess a monetary qualification of $250, as well as transportation to destination, operating from 31st December last, and to remain in force until March 31st next, unless otherwise ordered.

At various points throughout Canada, according to the Minister of Immigration and Colonization, there are certain classes of workers without employment. This information must not, however, be taken too seriously, as when cabling the provisions of the Order-in-Council to their representatives in the British Isles, the Department stated clearly that the $250 regulation would not be enforced against immigrants being brought forward by employers, who had made known to the Department their intention to import help, and where such application had been investigated and approved of by the Department. The Order-in-Council applies to British as well as other classes of immigrants.

In case of urgent need for labor, our members should communicate with our Legal Department.

How a Canadian Manufacturer Can Help the Made-in-Canada Movement

1. Giving the necessary instructions to his own Purchasing Departments.
2. Insist on the purchase of Canadian-made goods for any contract or building in which he is interested or can exercise influence.
3. Favoring the employment of Canadian architects and engineers.
4. Advocate in Boards of Trade and other similar organizations the support of the "Made-in-Canada" policy.
5. Secure the co-operation of local organizations, including women's organizations.
6. Secure the co-operation of local newspapers.
7. Urge upon his own employees the necessity of asking for goods made in Canada when they make their purchases in local shops.
8. Bring the matter to the attention of his local member in the Dominion House of Commons, the Provincial Legislature and Representatives of his Municipal Government, dwelling upon the urgent necessity of buying Canadian-made goods in order to provide work for Canadians.

Fuel Supply

A committee appointed at the last meeting of Council to consider the possibility of developing in Canada a supply of fuel adequate to the needs of the country has held a meeting, which was attended by Mr. Arthur V. White, President of the Conservation Committee, Ottawa. Preliminary plans have been made and are being put into effect.

Membership Campaign

The special membership campaign organized throughout Canada during the first week of December and continued in various localities after that date, has added 455 new members to the Association up to the present. These are distributed among the divisions as follows:—

Divisions.	*New Members.*
Ontario	176
Quebec	140
Maritime	75
Pacific	32
Prairie	32
Total	455

Special membership work is still proceeding in a number of industrial localities which were not thoroughly canvassed during the Campaign.

Canadian Engineering Standard Association

Mr. R. E. Jamieson, Canadian Consolidated Rubber Co., Limited, Montreal, has been reappointed to represent the Association on the main committee of the Canadian Engineering Standard Association for the year beginning March 1st, 1920.

Fuel Controller

At its last meeting, the Executive Committee brought in a recommendation that the Executive Council record the appreciation of the Association for the valuable work done by Mr. C. A. MacGrath, Fuel Controller, Ottawa.

Conference With National Council of Women

As the outcome of a resolution of the National Council of Women, coupled with a communication from that body asking that a representative committee from the Association meet a special committee appointed by the Council to discuss how the National Council could intelligently assist in the carrying out of the made-in-Canada principle, meetings were held in the Association offices in Toronto, on January 30. The conference proved mutually satisfactory and served to settle certain difficulties which had arisen in the minds of consumers. The boot and shoe, blouse, whitewear, dress, costume and neckwear trades were represented.

Engineering Index

The Commercial Intelligence Department directs the attention of members to the Engineering Index. This is an index of all the technical articles publishd in trade and technical papers. Many of these are of vital interest to manufacturers engaged in any engineering or metal working trade, yet it would be impossible for manufacturers to acquire the informa-

tion contained in these articles unless they subscribed to the multitudinous array of trade papers covering these trades throughout the world. The Index gives brief outlines of the contents of the various articles and states in what publication they may be found. If sufficient interest is aroused, the Committee may possibly arrange to publish interesting extracts regularly so that accurate information may be available promptly for interested manufacturers.

Activities of the Quebec Division and Montreal Branch

By R. W. GOULD

Secretary Quebec Division

AT a meeting of the provincial executive held on the 20th of January, it was decided to ask John Lowe, of Montreal Cottons, Ltd., to represent the association of the province at the inter-provincial conference to be held in Ottawa in the near future to take up the question of the unification of provincial labor laws. Mr. Lowe has already done good service in connection with similar work, and the Division is in hopes that he will agree to act.

The Quebec Division Executive and the Montreal Branch have decided to publish a monthly bulletin, printed in both French and English, dealing exclusively with the activities of the Quebec Division and the Montreal Branch. This bulletin will be for the information of our own members, and it is believed that it will provide a vehicle whereby the individual member will be kept in closer contact with the Association, at all times, than ever before.

Early last month the Montreal Branch took the lead in a joint luncheon given to Roger W. Babson, of the Babson Statistical Organizations of the United States, when Mr. Babson spoke on the value of vision in business. The Kiwanis Club of Montreal and the Montreal Publicity Association joined hands in the effort, and over 600 business men attended the luncheon. The effort was a splendid success from every angle.

The Montreal Division will launch a new membership campaign in the old city of Quebec early in February. It is hoped to have the general manager with us to direct the early operations, and also Mr. Bristol, manager of the Tariff Department. The drive will be opened by a noon day luncheon at the Chateau Frontenac.

There have been a large number of meetings of the various sections during the month, and I am convinced that among the New Year resolutions of many of the manufacturers in Montreal and throughout the province has been one embodying a decision to be better and more active association members during the coming year.

The Importance of Consequential Loss Insurance

By W. H. SLATER

Manager, Willis, Faber & Co. of Ontario, Limited

IT seems somewhat strange that manufacturers are only just beginning to appreciate the necessity for some form of insurance against fire which will do more than cover the actual damage to buildings, plant and stock. Practically every manufacturer realizes that a fire on his premises will involve him in a heavy loss, however well insured the property may be, but very few indeed take the trouble to inquire whether it is not possible to protect themselves against such loss, or even show much interest when the availability of such protection is pointed out to them. Consequential loss insurance or, in the meaningless phrase by which it is generally known, "use and occupancy insurance," is, however, beginning to be appreciated and it is only a matter of time before manufacturers will consider themselves inadequately insured unless they hold policies which will provide protection against loss by fire other than the actual damage to property.

The occurrence of a fire of any serious extent naturally results in the diminution of a factory's output and frequently, of course, even though not a total loss to property, causes an entire cessation of manufacture for a period of several months. The lack of production does not, however, do away with many of the expenses consequent upon the ownership of a manufacturing establishment, although it does do away with the profits which are depended upon to meet such expenses. Everything goes out and nothing comes in. Taxes, interest on bonds and mortgages, rent of real estate or the interest on capital invested therein, all have to be met while it is necessary to continue paying salaries of many of the permanent staff and even to pay wages to a few skilled workmen who may be too valuable to lose. There are, of course, many other maintenance charges which do not cease merely because no goods are being manufactured. There are, therefore, two classes of loss not covered under the ordinary fire policy—loss of profit on goods which should have been produced and expenses which should have been provided for by the production of such goods. Consequential loss insurance takes care of both of these.

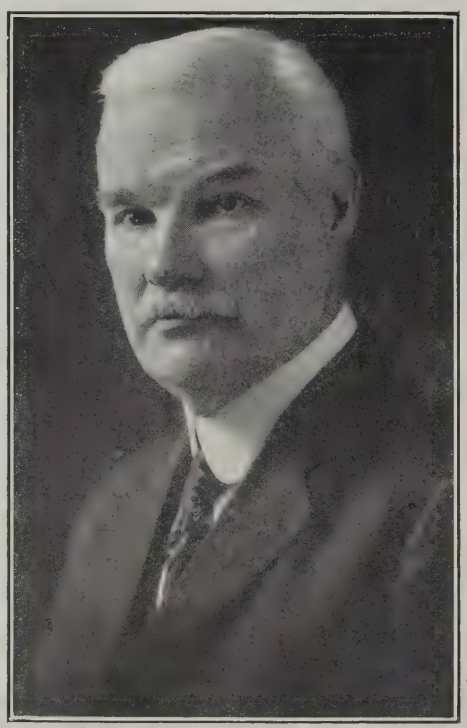
A consequential loss policy is a contract to pay, in the event of a fire, a daily indemnity equal to the actual loss sustained through non-production, until the factory can be reinstated and brought back to its pre-fire state of efficiency. The amount of the daily indemnity for which policies should be issued is based on the average daily net profit during the preceding twelve months plus maintenance charges as described above which would not cease with the cessation of production. In the case of a plant ordinarily working seven days a week, the total amount of insurance carried is 365 times the daily indemnity; in the case of a plant which does not operate on Sundays and holidays, the amount of insurance equals 300 times the daily indemnity. It is not necessary that the daily indemnity should be equal throughout the year, as that would in many instances necessitate paying for more insurance in the slack periods of the year than could actually be collected during those periods, since the policies do not in any case pay more than the actual loss sustained. A considerable amount of skill is required in drawing up a policy of this kind, and it should be entrusted only to an expert. The rate of premium which the insurance companies demand for a consequential loss policy is usually slightly less than the ordinary fire insurance rate, but so many different factors enter into a calculation of the hazard involved that every plant must be rated separately in accordance with its own peculiar circumstances.

Closer Relations with British West Indies*

Exchange Situation a Reason Why Canada Should Secure More of Its Tropical Supplies From the Indies—Commercial Union Would Render Both Parties Independent and Would Form a Combination of Great Strength

By T. B. MACAULAY
President, Sun Life Assurance Co. of Canada

LET us first of all consider our financial condition throughout the Empire. There is a danger that, after co-operating in time of war, the Empire, unless it co-operates much more closely than it does now, may actually go down in peace. Trade relationship and trade co-operation between the different parts of the Empire have long been looked upon as desirable, but the time has arrived when they are absolutely essential to Canada and to the whole Empire. That is a strong statement, but if you want to get proof of it, just consider some of the outstanding facts. Let us look at the exchange situation. When I went down to the West Indies last spring, ten months ago, I began to talk to the people there about the exchange situation, and I pointed out that at that time New York exchange was at a premium of 5 to 6 per cent. in London, and gradually increasing, and in Canada at 3 per cent., and I pointed out the seriousness of that. But since then the premium on New York funds in London has been growing; it has increased to 10, 15, 18 per cent. I was looking over some notes before I came here; the last time I made it out it was 17 per cent., and to-day it is about a 30 per cent. premium. The pound sterling in New York is worth about $3.74, and, as its par value is $4.86 2-3, that means the premium is just about 30 per cent. In other words, it takes 130 pounds of real, intrinsic value in England to pay for 100 pounds in New York; or $100 in New York has a purchasing power of $130 in London. In the same way our Canadian exchange has risen until it is over 8 per cent.



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What does that mean? It means simply that both Canada and the Mother Country have been purchasing from the United States vastly larger values of goods than they have been selling to that country, and that there is a great adverse balance of trade, being the excess of imports over exports, which both parts of the Empire are finding great difficulty in meeting; and the rate of exchange, the premium on New York funds, is the measure of that difficulty.

Before the war, exchange was at par. But how was it kept at par? At that time England, the Mother Country, had vast amounts of American securities which were owned in Britain, and on these securities interest was accruing every year in New York. That interest was available to put against the excess purchases in New York, and, if the interest was not enough, the exchange brokers just went out on the street and sold some of these American securities owned in Britain and transferred them. If the interest was not enough, the principal was available. But since the war this large amount of American securities no longer belongs to Britain; it has been transferred to American ownership, and that great amount of interest is no longer available for the excess of purchases. Moreover, the Mother country, in order to prosecute the war, has had to borrow huge amounts in the United States, partly from the public of the United States and partly from the government of that country. The total, I have heard estimated by a financier at 2,000 million pounds. On that huge amount interest now has to be paid in the United States. The payment of interest is now made the other way. Therefore, there is great difficulty in paying for those purchases; and in order to draw out the last of the American securities owned in Britain they offer this premium, that a person can now get—about 30 per cent.—beyond the American price—if he will just let them go. And how long will it be before all the rest of those securities will have been drawn out? There is not an inexhaustible supply, and the end is near at hand, and then it will not be merely a question of converting the securities that Britain owns in the United States; then it will be a question of transferring British securities to American possession.

And the same problem is going right on in Canada. We are buying from the United States large amounts, far more than we are able to sell to them. And how are we paying for them? By a steady flow across the boundary of our securities—very largely our Government bonds. One reason why the premium in Canada does not get as high as it does in England is that we are closer to the United States, they are more familiar with our securities, and we have the same currency—we have dollars—and the Americans will buy our securities more freely than they will those sterling securities of the Mother Country; therefore ours go across more easily. But that just means that there is all the greater danger, because no country can go on indefinitely paying for its purchases by the transfer of its securities; in other words, by borrowing, for that is what it comes down to.

How long can the Empire go on like this, if it is going to be borrowing from the United States all the time? I said that it was a question of the very utmost importance; I feel it is almost a question of life and death with the

* Address delivered before Hamilton Branch, C.M.A., on Wednesday, January 28, 1920.

Empire to get these things straightened out. How is it going to be done?

First of all, why is it that the United States are in this very favorable condition? In the first place, they made a lot of money during the war. While we were expending our money, they were reaping a harvest, and the war has made them wealthy, while it has impoverished the allies of the United States, who went in earlier. But, after all, that is just an accentuating cause. If you want to know the real cause you have to look at the position of the United States itself. The people of that country have to go outside of their own boundaries for hardly anything that they require. The people of the Northern States can find all the tropical goods that they want within their own boundaries, either in their own southern states or in Porto Rico, which they now own. The people of the southern states do not need to go outside; they need only go to their own northern states to get all their flour and foodstuffs and manufactured articles. Neither party needs to go outside of its own country. Neither section of the population need go outside the boundaries of the United States to get anything that they want; and the American tariff wall makes sure that they do not go.

Canada Exclusively Northern

Now, contrast that position with that of Canada. Canada is prosperous. I am a Canadian, and I am proud of Canada, and I am delighted to see how very prosperous and how very rapidly developing Canada is. But, gentlemen, I want you just to remember this fact, that Canada is exclusively northern. We are not like the United States; we have to go outside of our own boundaries for everything tropical or semi-tropical that we require. Now, take the West Indies. The British West Indies have great possibilities, but they, on the other hand, are exactly tropical and they have to go outside of their boundaries for everything northern that they want. And if we in Canada buy largely from the United States all the tropical and all the southern things that we require, and if they in the West Indies buy from the United States all, or a large proportion, of the northern things that they require, both parts of the Empire are rolling up an indebtedness to the United States, which is one of the causes of the rate of exchange, and which will in time become ruinous.

Now the question arises, can we not find a remedy? Does it not seem that it is the natural thing that the remedy should be found by those two parts of the Empire, which are naturally complementary, which unitedly make a territory somewhat similar to that of the United States in that it combines both north and south, northern and tropical? Why cannot those two make a partnership so that they will buy from each other, instead of buying from the United States? If they would do that—if we bought all the tropical things that we require from them, it would make their population greater, develop their resources, make them more wealthy, more prosperous; and if they in turn bought from us, it would develop our northern agricultural industries, our production of flour, our manufacturing and a hundred other things. Each would make the other more populous, more prosperous, each would extend the trade of the other, and each would to that extent cancel the indebtedness of the other to the United States, and to that extent rectify the rate of exchange.

It seems to me there is no need to say anything further along those lines. I will give you some figures just to show you how very acute the situation is. I have before me some figures regarding the trade of both the Dominion and the West Indies, which are illuminating. Taking such articles as flour, meat, fish, coal, butter and cheese, condensed milk, northern vegetables, cottons and other articles, which Canada is in a very favorable position to supply, the West Indies imported in 1917 nearly $36,000,000, and of this amount, what proportion did they buy from Canada? Less than 20 per cent. The great bulk of these articles went to them from the United States. I think you will agree with me that our proportion of this business should be 90 per cent, and not 20. I will take a few articles:

What West Indies Import

Of bread stuffs, the West Indies imported $7,000,000, and of this $3,875,000, or 55 per cent. only, came from Canada. Of this article our proportion should be 100 per cent.

Of fish, they bought $2,070,000, and of this but $1,287,000, or 62 per cent. from Canada.

Of butter and cheese, they took $970,000, but only $127,000, or 13 per cent., from Canada.

Of condensed milk, $625,000, $135,000, or 22 per cent., from Canada.

Of soap, $900,000, $22,000, or 2½ per cent., from Canada.

Of paper, $500,000, $103,000, or 20 per cent., from Canada.

Coal, $2,850,000, from Canada $147,000, or 5 per cent.

Meat, $1,700,000; from Canada, $12,600, or three-quarters of 1 per cent.

Lard, $520,000; from Canada, $235, or one-twentieth of 1 per cent.

Of all these articles combined, Canada supplied, as I have said, but $7,000,000 out of nearly $36,000,000, or less than 20 per cent.

Turning now to our own imports of tropical goods, we find a very similar condition. Of sugar, molasses, cocoa, coffee, rice and other tropical products, the West Indies exported about $63,000,000, and of this Canada took but $22,500,000, although she bought in all of those same articles over $108,000,000. We imported $86,000,000 worth of these tropical goods from other countries than the West Indies. It is true that in some cases these imports originated in British colonies, and were bought by us through a New York middleman, but the greater part of that $86,000,000 was of non-British origin. Here we have two parts of the British Empire, each living under the Union Jack, but each dealing chiefly with a foreign country rather than with each other, each enriching and building up that foreign country, instead of enriching and building up each other. What can be said in defence of such a condition? Can you imagine the people of the Southern States buying most of their northern produce from Canada instead of from their own northern territories? Or can you imagine the people of the northern states buying their tropical requirements from the West Indies in preference to Florida or Louisiana? Would the Americans allow Canadians to supply Porto Rico? The people of the British Empire must come to their senses, and take a leaf out of the books of the United States. The time for Empire co-operation has arrived, and for the good of both parties, and of the Empire to which we belong, Canada and the West Indies should, and in fact must, enter into a trade partnership to buy from each other, and help each other.

Situation in British Guiana

I have a special interest in British Guiana, and how serious the situation there is, may be seen by the following figures: In 1917, Guiana bought from the United States £843,000 of goods, and sold to the United States £116,000. In the same year she bought from Canada £330,000, and sold to Canada £862,000. In other words, for every dollar's worth of goods that the United States bought from her, she bought from the United States $7.27; for each dollar's worth that Canada bought from her she bought from Canada

42c. worth. I mention those figures just to show what great possibilities there are for trade development; how much they can help us and incidentally also how much we can help them. But now the question is, how is it to be done?

The Preferential Trade Agreement

We already have a preferential trade agreement with the West Indies, or rather one section of the West Indies. We have that preferential trade agreement, with which the name of Sir George Foster is associated, and that is one of the things that will be remembered to his credit. Whenever Sir George Foster's name is mentioned fifty years from now, it will be associated with that treaty. Under that agreement Canada gives a preference of 20 per cent. of the duty on a number of things, which are mentioned in certain schedules—articles originating in those West Indian colonies of the eastern group; and on the other hand the West Indies in that group give the same preference, 20 per cent. of their duty, to Canada and to the Mother Country on all those same articles. If it were not for that preferential treaty, I think it is a fact that British trade and Canadian trade would be almost non-existent in those islands to-day. That preferential treaty has saved the trade for Canada and for the Empire. But it has not gone far enough. It is a very remarkable thing that on two of the articles in regard to which this treaty has made each party sure of the markets of the other—flour on the one side, from Canada, and sugar, on the other side, from the West Indies—on both these articles there is an exception in the treaty, whereby the rate of preference is greater than the regular 20 per cent. The 20 per cent. treaty has been very beneficial, but we want to be tied together commercially just as strongly almost as if we were provinces. We want to have control of those markets, each for the other, and the question is, how?

I took a trip down through the West Indies. I may say that I happen to be President of the Canadian-West Indian League. I was drawn into this a good many years ago, and the more I have got into it, the more deeply interested I have become; not merely because it is a West Indian question, but because I have seen its importance to the whole of Canada. And I went down to the West Indies, and in my capacity as President of the Canadian-West Indian League, I was able to reach all classes and was given a very cordial welcome everywhere. All through those islands I suggested to the people that this preference should be increased, and everywhere that idea was received with enthusiasm. The suggestion was that it should be increased from 20 per cent. to 50 per cent., and not in one place did I hear one solitary word or voice opposing that idea.

The Question of Revenue

The question was raised, however—"How about revenue?" "We need revenues." Their average tariff down there is only perhaps about 12 per cent. Their tariffs are low. They said: "If we throw off this preference we shall be short of funds." Well, that question was raised at the first place where I discussed matters, but after that I raised it every time myself, in advance, and I said this: "Gentlemen, there are two ways in which you can give us a preference of 50 per cent. You can have your tariff of 12 per cent., we will say, and you can cut it down to 6, and then get into financial trouble right off; or you can let your present 12 per cent. remain as your preferential rate and make your general rate double that amount, and then you will have no financial trouble at all, and in addition to that you will equalize the inequality which comes from our giving you a 50 per cent. preference on our Canadian tariff, which is heavy, and your giving us a preference on a lower tariff, and it makes any preference something more worth while."

Nowhere did I hear a single voice that was not in favor of that, and I believe that idea will be accepted. I came away with the idea that everywhere, at any rate in the colonies that I visited, the people are absolutely ready for that increase in the preference from 20 per cent. to 50 per cent. Furthermore, I myself urged, and I heard it urged in many cases, that instead of the Act having a schedule attached to it, it should, like our British preference, apply to everything originating in either country; that the schedules should be abolished and the preference should apply to everything originating in Canada or originating in the West Indies.

One point that you will notice is the British preference, which is given down there. The people there are very strongly British, and one of the things you have to consider is this: They say—"We cannot give Canada any preference that we do not give to the Mother Country." As far as that goes, I sympathize with that point of view, but, as you will notice, there is what may be called a little inequality, because we give them the preference in our markets with no competitors and they give us a preference in their markets just on an equality with the Mother Country. On the other hand, gentlemen, the things that they need down in the West Indies, or nine-tenths of them, are things that the Mother Country cannot supply—things that are the natural products of Canada, of northern countries—things which they simply must get from either the United States or Canada. I do not like the idea of discriminating against the Mother Country in anything; and we do not lose in any case. There are few things that the Mother Country supplies; cottons are perhaps about the only thing. But the things they need are nearly all northern products, and that is entirely satisfactory.

British Guiana's Possibilities

But we now come to another suggestion. I want to point to British Guiana. British Guiana has very special problems. Most of the Colonies are pretty well developed, highly developed. Barbados has a population of about 1,100 to the square mile. That gives you an idea of the density. But when you come down here to British Guiana, you come to a place that is undeveloped; 90,000 square miles, and but little over 300,000 people, or if you exclude Indians, say, three persons to the square mile. That country is capable of tremendous development. Along the shore here is a belt of low-lying land, rather inclined to be swampy, but alluvial land just a little above the level of the sea. In fact, there is a wall all along the sea coast to keep the sea out. That land produces enormous quantities of sugar and rice. It already produces great quantities of these, but, gentlemen, I have been down there, and from what I have seen, as well as from what I have heard and have read, I believe the capabilities of that section in the way of increased production are simply enormous. I am assured that British Guiana alone could produce enough sugar to supply the British Empire. At any rate, whether that is true or not, it is capable of enormous expansion in regard to both sugar and rice. Then when you come into the middle country, here you find a country of great forests, with timber resources, rubber, balata, diamonds, gold and this bauxite for the aluminum industry, which the Americans are getting hold of. But here is a very interesting thing. When you get down here in this south-west corner you come to a great prairie section. It is natural prairie, almost inaccessible, capable of sustaining great herds of cattle, and the people there are very anxious to develop it. One of the leading men down there told me the people of British Guiana would almost sell their souls to get a railway built to open

up all that country. They have short railways here, but what they want is one that will come down here to the western and southern part.

Now I want to draw your attention to one of the peculiarities of these boundaries; that is why I got this map. This section of prairie land here does not stop at the boundary line; in fact, by far the greater part of all that huge prairie district is on the Brazilian and Venezuelan side. I have taken the trouble to write off to different authorities and I have gradually got pretty well mapped out just where it is. It is a vast region of prairie, capable of sustaining an enormous population. On the Brazilian side the people do raise cattle. And where do those cattle get an outlet? A certain number of them come down here to Manaos, but all the rest of them have to be shipped nearly 2,000 miles by the Amazon to the sea before they get an outlet. Now, gentlemen, for political purposes that would be Brazil. For commercial purposes that section of Venezuela and this part of Brazil can be made a part of British Guiana, and the development of British Guiana would mean the development of that section there, which would be made commercially tributary.

Tired of Colonial Office

These people want development in the worst way. The question is, how? They have begun to get a little tired of thinking the Colonial Office in England will do something for them in this respect, and they wonder if Canada would.

Consider the relations between Porto Rico and the United States. Porto Rico and the United States have a union that is exceptionally good. Porto Rico has its own legislature. It has its own governor, appointed by the President of the United States, who also appoints a number of other leading officials, who have votes; but it controls its own affairs through its own legislature. There is no tariff of any kind whatever between the United States and Porto Rico, but absolute free trade. The collections from the tariff, while they are at the United States' rate, do not go to the United States Government; those collections are handed over to the local government for local purposes.

Now just think of what has resulted from that. This system has been in operation since 1901, and I have the figures for the seventeen years to 1918. In 1901 Porto Rico exported $8,000,000 worth; in 1918, seventeen years afterwards, under the operation of this plan, the exports had risen to $74,000,000. In 1901 the imports were $9,000,000, and during those seventeen years they rose to $63,000,000. Think of that development. It is like a miracle almost. It is stupendous. The exports increased nine times in seventeen years; and, gentlemen, of those imports of $63,000,000 into Porto Rico, $59,000,000 came from the United States and only $4,000,000 from all the rest of the world. That arrangement has made Porto Rico prosperous; it has made the United States more prosperous. Fifty-eight millions of exports are worth something; and besides increasing the prosperity, it has forced all that trade practically into American channels.

Now, if the people of British Guiana wanted an arrangement of that kind, I should say let them have it by all means; I should be delighted. But I do not know that they do want it, and it is not for us to urge it. The people down there want principally two things. Well, in all the islands they want our trade. In British Guiana they want to increase trade with us, and they want to get their country developed. Those are the elements that they want, and it is better to meet them on their own footing. They talk along commercial lines; let us talk along commercial lines. The question is, can we get something that on the commercial line would be practically the same? I think we can. There is the alternative of having a permanent free trade agreement, ratified by the British Parliament, which would put British Guiana permanently on the same footing as Nova Scotia, for instance, so far as trade matters are concerned, but without our having to be bothered with their government. I think that probably that would end in commercial union of the Porto Rico type; but we do not need to consider that. Let us take one step at a time and let things develop as is natural.

Result of Political Union

Let us consider for a moment what would be the result if they came in as provinces—just to get our minds clarified. If British Guiana came in as a province, they would have the right to say, "Treat us as you treated the Canadian provinces. For the Maritime Provinces you built the Intercolonial Railway, for Prince Edward Island the Prince Edward Island Railway, and for the Prairie Provinces and British Columbia you arranged for the building of the Canadian Pacific. Treat us like that." Suppose that the building of that railway, which is a little over three hundred miles, would cost $20,000,000. It is a perfectly level country, a good deal of it through savannahs, and there would be only one long bridge, and the only trouble would be the dense forests in a few places. But suppose we built that. I think that if our Government could make an arrangement to get commercial control of that country just by developing it on the same basis as one of our own provinces, it would be one of the best bargains Canada ever made. Furthermore, if we had a free trade arrangement with British Guiana, it would soon be extended to other colonies. Every one of the other sugar producing colonies, like Barbados, St. Kitts and Jamaica, would before long be in on the same basis. Then, gentlemen, Canada would be a country that would be a rival to the United States. Then we would have all that tropical country which for commercial purposes would be ours, just as much as the Southern States and Porto Rico belong to the United States, and our trade would develop in an enormous way.

The next step would be to make a commercial treaty of the same kind, with a preference of, say 20 per cent., with Brazil, and then we would have all that section politically independent, but commercially part of Canada and building up Canada. Moreover, you see the little gulf in here, and the Orinoco, which is the inlet to Venezuela; Trinidad gives a footing for Venezuela, as British Guiana gives an equal footing for Central America.

Why Countries are Backward

You may ask, why do not these countries go ahead and develop as it is? Why cannot they do that? Suppose British Guiana were to say to Brazil, "We want a preferential treaty." Brazil would say right at once, "What is the use? You produce the same kind of thing that we produce." No. But suppose that Canada and British Guiana went to Brazil and said, "We will give you a preference of 20 per cent. of the duty off everything coming and going through that section of the country." I do not know whether it would extend to the whole country or not. The United States has a 20 per cent. preferential treaty with Brazil. We would give a sufficiently large preference to obtain this trade, and in return for the same kind of thing for them. British Guiana would not mind, because she would have free trade with our markets. We could build up that and make it commercially ours. If we do not do anything the United States is going to get everything down there, but by this means we should build up Canada, build up the islands and

(*Continued on page* 83.)

Technical Education Act Becomes Operative

Director Has Been Appointed and is Now Arranging the Preliminaries—Credit Due the C. M. A. for Having Promoted the Movement—Explanation of the Legislation Under which the Work is Being Carried On

By W. A. C.

THE recent appointment of Professor L. W. Gill, M.Sc., late of Queen's University, to the newly created position of Director of Technical Education for Canada, marks the culmination of years of effort on the part of those interested in this important phase of educational activity. The agitation for an adequate system of technical education dates back to a period long before the war, and it has passed through many phases, but it was only through the lessons taught by the war that the urgency of the matter was so forcibly emphasized that action became imperative.

To the Canadian Manufacturers' Association must be accorded a good deal of the credit for having forced the subject into prominence. At a meeting of the Toronto Branch on November 7th, 1918, the following resolution was passed:

"Whereas the development of Canada's immense natural resources is an imperative and immediate duty, in view of the enormous cost of the war and the need of employing usefully the immense masses of labor and skill released when peace is proclaimed;

"Whereas the close of the war affords the supreme opportunity for launching a national scheme of technical training that will make Canada's workers in all lines thoroughly efficient; that will vitalize all the school work in the various provinces by presenting a worthy national objective; that will open out new and profitable spheres for the ambitions of Canada's young manhood and womanhood, thus challenging them, from patriotic motives, to stay here and assist in up-building of this Dominion; and that will enable Canada to hold her worthy place against world-competition during peace, as she has done through her fighting forces in war;

"Therefore, resolved, that this Association arrange without delay for a delegation from its membership, as well as from other bodies willing and ready to act immediately, to wait upon the Dominion Government and ask that a Technical Training Board be added at once to the Reconstruction Committee of the Cabinet, for the purpose of formulating a comprehensive policy of Federal aid to industrial training and technical education in all the provinces of Canada, and that legislation necessary for the operation of such Board on a permanent basis be prepared for the coming session of Parliament."



L. W. Gill, M.Sc.
Director of Technical Education, Department of Labour, Ottawa

Following up this resolution, a delegation proceeded to Ottawa and laid before the Government strong reasons for early action along the lines suggested. Doubtless influenced by this delegation, the Government introduced, at the following session of Parliament, Bill No. 131, being "An Act for the promotion of technical education in Canada," under the terms of which an appropriation of ten million dollars is set aside for this purpose. The appointment of Prof. Gill is one of the first fruits of this Act.

The following summary of the legislation under which Prof. Gill will administer his department may prov illuminating. As a matter of fact, except to name the Minister of Labor as executive administrator, the Act does not provide for any stated organization to carry out its purposes.

By the term "technical education" is meant any form of vocational, technical or industrial education or instruction approved by agreement between the Minister of Labor and the Government of any province as being necessary or desirable to aid in promoting industry and the mechanical trades, and to increase the earning capacity, efficiency, and productive power of those employed in them.

The Minister of Labor, under whose supervision the Act will be administered, is vested with sole authority to judge of all questions arising out of the Act and must submit an annual report to Parliament containing information as to the work done. Officers and employees may be appointed under the Civil Service, but no organization is outlined in the Act.

The $10,000,000 is to be expended in graduating amounts, beginning with an annual sum of $700,000 in 1920 and increasing $100,000 each year until 1924, from which time to the end of the fiscal year 1929 the sum will be $1,100,000. The allotments are paid quarterly and cannot exceed the amount spent on technical education by the province within that year. Unexpended balances may be carried forward, provided that the balance does not exceed 25 per cent. of the annual appropriation. In case it does, the approval of the Minister must be obtained. The sum of $10,000 will be paid to the Government of each province every year, and the remainder of the appropriation for the year will be allotted and paid to the Government of the province in proportion to the population of each province, respectively, as determined by the last Federal census.

The terms to which the provinces must agree in order to receive the grant are:

1. All grants must be used for technical education in the manner agreed upon by the Minister of Labor and the Government of each province and approved by the Governor in Council.

2. No part of the grant can be used to meet liabilities incurred prior to July 1st, 1919, for lands, buildings, furnishings, or equipment secured for technical educational purposes.

3. Only 25 per cent. of the annual grant can be used to secure land, or to erect, extend or improve buildings, or supply furnishings and equipment.

4. Each Province shall make an annual report to the Minister.

5. The Minister shall be the sole judge of questions arising out of the Act.

6. Every province receiving a grant shall furnish evidence required by the Minister of Labor to show that the grants made are expended for technical education as provided in the Act.

Professor Gill, the new Director of Technical Education, is a native of Prince Edward Island and an honor graduate and gold medalist (1896) of McGill University in mechanical engineering. Subsequently he took up post-graduate work in electrical engineering combined with research work in magnetism, and was awarded an 1851 Exhibition Scholarship for two years, one of which was spent at McGill and the other at Harvard. After leaving the university, Prof. Gill took up commercial work with the Westinghouse Electric and Manufacturing Co., Pittsburg, where he was given special facilities for studying manufacturing methods and shop practice.

In 1900, Prof. Gill was appointed Professor of General Engineering in the School of Mining, Kingston, Ont., at that time affiliated with Queen's University. As the latter had not yet developed a faculty of practical science, he concentrated his efforts on developing university courses in the various branches of engineering. Consequent upon this development he was appointed professor of mechanical and electrical engineering and later professor of electrical engineering.

In January, 1915, Professor Gill volunteered for overseas service and was granted a commission in the Canadian Engineers. Later in the same year he offered, through Queen's University, to recruit from the students and graduates a battery of field artillery. On February 3rd, 1916, as major in command, he proceeded overseas with this battery and, after six months' training in England, proceeded with it to France. He remained in command of this unit until March 26th, 1917, subsequently commanding the 33rd and 45th batteries successively. After the taking of Vimy Ridge, Major Gill was compelled to retire from combatant service on account of ill-health, and after several weeks in hospital, was requisitioned by the War Office for special technical duty with the Ministry of Munitions. After nine months he applied for return to combatant service and was under orders to proceed to France when the armistice was signed.

Early in December, 1918, Major Gill was appointed Assistant Director of Educational Services, and was responsible for the organization and administration of all the work of the Khaki University in England, being promoted to the rank of Lieutenant-Colonel. After demobilization, Mr. Gill accepted a temporary appointment to his pre-war post at Queen's University. His experience gives him peculiar qualifications for his new work.

Minimum Wages and Maximum Hours in Manitoba

By G. E. CARPENTER,
Secretary Prairie Division, C.M.A.

THE Minimum Wage Board, appointed by the Manitoba Government to investigate and fix, in accordance with conditions in Manitoba, standard minimum wages and hours of employment and standard conditions of labor for female workers employed in shops, factories and mail-order houses in cities in Manitoba, has been carrying on its work now for about eighteen months.

It will be recalled that, when a public demand arose for some legislation for the protection of female workers, the Trades and Labor Council endeavored to secure the passage of a bill providing for the enactment of a Statutory Minimum Wage. The Prairie Provinces Branch agreed that some legislation should be enacted, but advocated that a Minimum Wage Board should be established for the purpose of dealing with each line of business separately so that ample protection should be afforded the workers, having in view all the conditions surrounding industry. In taking this action the Branch received strong public support, with the result that an Act was passed at the session of the Manitoba Legislature, held in 1918, and a Minimum Wage Board was created for the purposes set forth above.

A summary of the Board's awards to date has recently been issued and this may prove of interest to members of the Association elsewhere in Canada. While, of course, all employers are not entirely satisfied with the findings of the Board, it is a significant feature that, with two exceptions, the awards have been agreed to at a conference of workers, employers and members of the Board.

The summary is as follows:—

Number of awards made and industries affected, 44; lowest minimum now in force, $8.50 (Dauphin laundries only); highest minimum now in force, $12.50; lowest maximum hours per week, 44 (offices only); highest maximum hours per week, 52.

The prevalent minimum wage rates for various industries in the Province are as follows:

City of Winnipeg and St. Boniface.—Laundries, groceries, pickles, macaroni and vermicelli, yeast, confectionery and biscuits, soap, paper box, cigars, drugs, abattoirs, creameries, $11; laundries (Brandon), $10.50; laundries (Dauphin), $8.50.

Note.—Previous to August 17th, 1919, minimum wage rate in the City of Winnipeg and St. Boniface for laundries, pickles and macaroni and vermicelli was $9.50, and for groceries, yeast, abattoirs, creameries, confectionery and biscuits, soap, paper box and cigars, $10. Also, minimum wage rate for laundries in Brandon previous to this date was $9.

Minimum wage rate for the following is $12.—Departmental stores five, ten and fifteen-cent stores, retail stores, bags, gloves, bedding, jewellery, auto top, caskets, leather goods, tents and awnings, paints, rags, brooms, seed packing (Winnipeg and Brandon—separate regulations), tailoring, knitting, millinery, printing, etc., mail order, ladies wear, ladies' hats, garment and regalia, fireworks factories (Brandon only), dyeing and cleaning, hair dressing, furriers, dressmaking, amusement houses.

Minimum wage rate for the following is $12.50.—Restaurants, hotels, offices.

Maximum hours of labor per week for various industries are as follows: Laundries (Winnipeg, Brandon and Dauphin), macaroni and vermicelli, seed packing (Brandon only), fireworks (Brandon only), shops and stores (Brandon only), hotels, 52 hours; groceries, pickles, departmental stores, cigars, gloves, bedding, auto top, caskets, leather goods, tents and awnings, paints, rags, brooms, seed packing (Winnipeg only), tailoring, knitting, millinery, dyeing and cleaning, 50 hours; confectionery and biscuits, retail stores, soap, paper box, bags, drugs, jewellery, 49 hours; yeast abattoirs, creameries, five, ten, and fifteen-cent stores, printing, etc., mail order, ladies' wear, ladies' hats, garment and regalia, hairdressing, restaurants, furriers, dressmaking, amusement houses, 48 hours; offices, 44 hours.

Building Increases

Permits Issued During 1919 Were Very Considerably in Excess of Those of 1918

A review of building operations in Canada during 1919, prepared by *Construction*, indicates a very substantial increase in activity. Reports of building permits received from thirty-eight important centres give a total of $73,684,453, as compared with $35,454,930 in 1918, an increase of 107.82 per cent. Figures were in a number of cases incomplete, so that final returns may be even more favorable. Only in two places were decreases recorded, and both were relatively small.

Replies to an enquiry sent by *Construction* to the building inspectors and city engineers of various municipalities are very optimistic in tone, and indicate a heavy volume of building work for the coming year. Practically every section in the Dominion is looking forward to a period of activity which, if fully realized, will witness operations approaching, if not equalling, the heavy investment of the boom days of 1910-11.

Boot and Shoe Manufacturers Get Together

Important Convention of Shoe Manufacturers' Association Held in Quebec—Meeting Does Much to Develop Spirit of Camaraderie—Members Decide on a Vigorous Advertising Campaign—Other Important Business Transacted

By ALEX. MARSHALL
Secretary-Treasurer, Shoe Manufacturers' Association

AN historic spot was selected to hold an historic Convention. Quebec, the cradle of the shoe trade in Canada, witnessed the first Annual Convention of the Shoe Manufacturers' Association after its first year of organization work and growth.

For an infant, it is surprisingly lusty and vigorous. About a hundred delegates attended the various business sessions. At the social functions, the hide, leather and allied trades swelled the total to between 300 and 400.

The same officers were re-elected for the coming year, the active officers being: President, F. S. Scott, Getty & Scott, Limited, Galt; First Vice-President, Jos. Daoust, Daoust, Lalonde & Co., Ltd., Montreal; Second Vice-President, J. D. Palmer, Hartt Boot & Shoe Co., Limited, Fredericton, and the Executive Committee, composed of one representative for every seven members or fraction thereof, in Ontario, Quebec, Maritime Provinces and British Columbia.

Progressive Programme Mapped Out

Already the Association has proved its worth to the members, and a very progressive programme has been laid out for the coming year. As a result of committee work, a scheme of standardization of cartons has been adopted, reducing the almost unlimited number of sizes previously used to 12 standard sizes. This will enable the shoe manufacturers to effect economies in placing their orders, will assist in the standardization of containers, and will enable the retailers to preserve neatness and uniformity in their shops.

Another committee has been developing plans in connection with the improvement of technical educational facilities for the shoe trade. Inasmuch as Montreal produces about 46 per cent. of the shoes made in Canada, and Quebec City about 18 per cent., with an additional small percentage made in some of the intermediate towns, it was felt that the logical place for the development of the technical education system was in the Province of Quebec. The matter has already been discussed with Sir Lomar Gouin, the Prime Minister, and it is anticipated that the Provincial Government will be ready to stimulate shoe manufacturing in Quebec by providing adequate facilities for the training of shoe workers in the technical and cultural subjects which will not only make them better shoemakers and better equipped for the battle of life, but will improve the character of the citizenship of this country.

A number of resolutions were passed at the meeting dealing with subjects of vital interest to the shoe manufacturers, and possibly the most important was that in which the Association endorsed the proposal of the Shoe Retailers' Association to hold a style show in Montreal in the week of July 12th to 17th next. The active co-operation and assistance of the Shoe Association in making the Shoe Style Show has been pledged, and undoubtedly the retailers will be ready to carry this project through in the best possible style, particularly when it will be happening in conjunction with their own annual convention.

It has also been suggested that some provision should be made for getting a selection of the shoes shown at the Style Show to be assembled into a made-in-Canada exhibit for the Canadian National Exhibition in Toronto.

Very valuable contributions to the available information regarding the shoe industry and surrounding conditions were contributed in addresses by Mr. W. P. Bennett, of "Hide and Leather," Boston. Mr. Bennett dealt particularly with the trend of leather prices and expressed the opinion that firm prices will hold for some time yet to come. Mr. R. D. Fairbairn, a member of the Canadian Trade Commission, spoke eloquently with regard to the necessity of developing a great Canadian export trade, and put before the shoe manufacturers the obligation that is laid upon them to utilize their utmost efforts to seize and hold their fair share of export business. Mr. T. H. Reider, president of the Ames, Holden, McCready Company, Montreal, but still a newcomer in the shoe business, gave a very able address which he entitled "A Freshman's Survey of the Shoe Industry," in the course of which many points were brought to the attention of the shoe manufacturers which were suggested as improvements in the conduct of the shoe business. In his closing remarks, Mr. Rieder emphasized the importance of having a fully equipped secretarial department, which would deal with all matters of public interest relating to the shoe trade and co-operate with Government departments in assembling statistics and other necessary information. This matter was also made the subject of a resolution at the meeting, and the Executive Committee is charged with the duty of considering the best ways and means of putting the question before the membership at large.

A $50,000 Advertising Campaign

For six months or more, arrangements have been under way to inaugurate an extensive "Canada Product" campaign, directing the public's attention specially to the shoe trade. Mr. J. D. Palmer, of the Hartt Boot & Shoe Co., Limited, Fredericton, second vice-president of the Association, delivered a splendid address covering the whole situation, and ably spoke, in moving the resolution supporting the spending of $50,000 on an educative campaign, directed to the general public, retailers and their clerks, with a view to placing the high standard of the Canadian shoe industry before the Canadian people and earning the place in the public mind that the importance of the industry warrants. The resolution was unanimously carried, and Mr. Palmer is the chairman of the committee charged with the proper carrying out of this campaign.

Although much important business was dealt with at the meeting, the outstanding feature of the whole convention was the spirit of camaraderie that was in evidence throughout the whole membership, composed as it is of two large elements, English-speaking and French-speaking Canadians. It was most interesting to note the approval with which was met on all sides the various proposals that came up.

There was practically no serious divergence of opinion on any subject, and a much better personal understanding was arrived at by the manufacturers from all quarters than had previously been the case. Any important comments delivered from the floor of the meeting were immediately rendered in English if the original was French, and in French if the original was English. Not only that, but it was very interesting to note the way in which the French and English members met together and discussed personal matters at the luncheons and other social features. Too high praise cannot be given to the hospitality of the shoe and leather trades of the City of Quebec. The get-together spirit was more than ever in evidence on the last night, when the Association banquet was held. On this occasion the speakers were the Hon. Arthur Meighen, a member of the Cabinet of the Dominion Government, and Sir Lomer Gouin, Premier of the Province of Quebec.

On the whole, it would be difficult to conceive a more satisfactory convention, and it is to be hoped that in many other industries similar rapprochements will come about.

Ontario Shoe Manufacturers

Annual Meeting of Provincial Association Held in Toronto Last Month—Several Interesting Addresses Delivered and Officers Elected

A well attended meeting of the Ontario Shoe Manufacturers' Association was held in Toronto on Wednesday, January 7th, 1920. In the morning, the members divided into groups according to the classes of goods made and exchanged information for their mutual advantage.

The afternoon session was devoted to subjects of general interest. The members had the privilege of hearing addresses from Mr. S. R. Parsons, the Canadian employers' delegate to the recent International Labor Conference, on how the proposals and activities might affect Canadian industry, and from Mr. H. V. F. Jones, assistant general manager, Canadian Bank of Commerce, who gave a most interesting review of financial conditions during the war and the effect of exports, imports and war loans on the exchange situation. Mr. J. R. K. Bristol also made a short address on the Canadian tariff.

At this meeting the Ontario Association endorsed the action of the Executive Committee of the Shoe Manufacturers' Association of Canada in coming to a friendly arrangement with the Retailers' Association regarding the cost of cartons and cases and special features in shoes. They also endorsed the policy of holding a great Shoe Fair in Montreal on July 12-17 next, and are advocating that the shoes assembled there be retained for further showing at the Canadian National Exhibition in Toronto.

The shoe manufacturers also expressed themselves in favor of having imported shoes marked with the country of origin, and Canadian shoes also specially distinguished. This portion of the programme will probably be best taken care of in connection with the proposed general advertising campaign on which the shoe manufacturers are about to embark.

The elections took place at this meeting resulting in Mr. A. Brandon, of Brantford, and Mr. G. W. McFarland, of Williams Shoe, Limited, Brampton, being re-elected Hon. Chairman and Chairman respectively. The rest of the Executive Committee is composed as follows: Vice-Chairman, G. H. Ansley, Perth, Ont.; F. H. Ahrens, Kitchener, Ont.; S. H. Parker, Preston, Ont.; C. S. Corson, Toronto, Ont.; W. H. Duffield, Hamilton, Ont.; N. M. Davison, Kitchener, Ont.; the latter representing the felt shoe manufacturers. Mr. F. S. Scott, M.P., of Galt, chairman of the Shoe Manufacturers' Association of Canada, was also made an ex-officio member of the Ontario Executive.

Clay Products Manufacturers

Three-Day Meeting Takes Place in Toronto—Much Valuable Information Conveyed to Members Through Addresses by Experts

Members of the Canadian National Clay Products Association convened in Toronto on January 20, 21, and 22, for their eighteenth annual meeting. The president, Wm. Burgess, Todmorden, opened the proceedings with an address urging co-operation. The report of the Executive Committee and also that of the secretary-treasurer was made by Gordon Keith.

The Tariff Committee reported that efforts had been made to secure some amendment in freight rates as applied to clay products. Just for the present the matter was in abeyance until a projected increase in freight rates had taken place. In the meantime, as many clay workers are members of the C.M.A., the committee had arranged to take advantage of the tariff and transportation services of the larger association.

The Technical Education Committee, through Mr. Millard F. Gibson, chairman, reported progress on an important scheme for the education in Canada of those desirous of taking up the study of ceramics. Heretofore there have been no opportunities for technical training in Canada or for investigational work on the development of our great natural clay resources. No particulars of the committee's report are available as yet, but the meeting was given to understand that some very outstanding developments are pending. It is expected that in February a comprehensive report will be made public.

The election of officers resulted in the reappointment of last year's executive by a unanimous vote. The members of the executive are: Thomas Kennedy, Swansea, past president; William Burgess, Todmorden, president; Ryland H. New, Hamilton, 1st vice-president; Millard F. Gibson, Toronto, 2nd vice-president; T. H. Graham, Inglewood, 3rd vice-president; Gordon Keith, Toronto, secretary-treasurer; and the following councillors: H. B. Hallatt, Tilbury; W. H. Freeborn, Brantford; N. T. Gagnon, Montreal; Andrew Dods, Mimico; John S. McCannell, Milton; F. B. McFarran, Toronto; Chas. A. Millar, Toronto; C. B. Lewis, Toronto.

During the convention a number of valuable papers were read and delegates were given an opportunity to see some of the clayworking establishments in the vicinity of Toronto. The annual banquet took place on the evening of January 21, the guests including Brig.-Gen. C. H. Mitchell; J. C. Reilly, Secretary of the Association of Canadian Building and Construction Industries, and Hon. H. C. Nixon, Provincial Secretary of Ontario.

In his address on "Pottery Possibilities in Canada." Millard F. Gibson, manager National Fireproofing Co., Toronto, discussed the possibilities of developing manufactures of fine porcelain, glassware and clay products generally to take the place of the present considerable quantity imported from Europe and the States. Mr. Gibson told of the many interesting examples of fine pottery, glassware, etc., which have been made under the direction of Professor Keele, at Ottawa. He instanced the discovery of a new bed of white clay near James Bay, which, with the large deposits of feldspar and other minerals, will make it possible for Ontario to go in for the manufacture of fine chinas, ornamental glassware, optical glass, etc., and he felt that every encouragement should be given to the development of the ceramic industry on the widest scale possible.

The Control of Profiteering in Great Britain

Canadian Manufacturers who Have Been Following the Operations of the Board of Commerce in this Country, will Find Matter of Interest in Contrasting its Activities with those of the Bodies Formed to Administer the Profiteering Act in Great Britain

By JOHN C. KIRKWOOD

ON August 19th of the past year Great Britain put on her Statute books the Profiteering Act. This Act provided for setting up local tribunals to receive consumers' complaints, for the penalizing of those found guilty of profiteering, and gave permission to local authorities to trade.

The passage of the Act was a somewhat hasty proceeding, and was put through just on the eve of the summer holidays, when members of Parliament were fatigued and eager to bring an arduous session to an end. The Bill was admitted to contain imperfections, and nobody liked it any too well, but it seemed necessary to put it through to allay public irritation.

The arguments in favor of the passage of the Bill were:

1. Profiteering has a profound deterrent effect on export trade. High prices at home induce manufacturers to concentrate on the home market, whereas the necessities of the country require the stimulation of export trade.
2. If and when domestic prices are at an unreasonably high level, with unconscionable profits, the British market would be flooded with unnecessary articles and the trade balance would be swung still farther against Great Britain.
3. Profiteering leads to social unrest.

As against these arguments it was urged by critics and opponents to the Bill that:

1. There was not enough good in the Bill to counteract the positive harm which it would cause to trade.
2. It embodied principles unfair and unjust from the point of view of English law.
3. It would create another vast and expensive department.
4. If the prices of all the articles which could be brought to the attention of the tribunals—clothing, furniture, foods, cigarettes, and the like—were to be thoroughly investigated from the beginning to the end, there would have to be a Costings Department with highly trained experts. This would take a very long time, but the Act was to last for a period of only six months.
5. The Bill contained no indication that trusts would be dealt with, and how could small local tribunals deal with trusts?
6. The Act would make small traders victims of trial and penalties by local tribunals.

On the charge that the Bill made no provision for dealing with trusts, Sir Robert Horne, Minister of Labor, said: "For the first time the Board of Trade will have powers to make those investigations without which no trust or combine can be broken up or its prices dealt with." Sir Auckland Geddes, President of the Board of Trade, speaking on behalf of the Bill, gave the following definition of profiteering:

"Profiteering is to make an unreasonably large profit, all the circumstances of the case being known, by the sale to one's fellow citizens of an article which is one, or one of a kind, in common use, by or for profit."

Methods of Enquiry.

The Profiteering Act authorizes the Board of Trade to make orders applying the Act to any article or class of article declared by the Board to be articles of a kind in common use by the public, or material, or machinery, or accessories used in the production of such articles.

The provisions of the Act are administered by means of committees or tribunals of three grades—central, local, and appeal.

The Central Committee

The Central Committee is presided over by Mr. C. A. McCurdy, K.C., M.P., Parliamentary Secretary of the Ministry of Food, and Chairman of the Committee on Trusts. He is assisted by such deputy chairmen as he may have appointed.

In general the functions of the Central Committee are to investigate cases of alleged profiteering by persons other than retail traders, and when necessary to institute prosecutions. In pursuance of this duty it will itself collect information as to prices, costs, and profits, and will study the methods and practices of the various trades or groups of trades, including trusts and trade combinations concerned in the production and distribution of goods to which the Act is applied. In order that the Central Committee may be in a position to advise the Board of Trade as to what may be considered a reasonable price for any article, it is empowered, should necessity arise, to appoint sub-committees to carry out the investigation into the cost of production throughout the various stages of manufacture.

Local Committees

The local authorities, that is to say, in England and Wales, the Common Council for the City of London, and the Councils of the Metropolitan and Municipal Boroughs, and of the urban and rural districts, and the Council of the Scilly Isles, and in Scotland, the Councils of the County, and the Councils of the Royal, Parliamentry, or Police boroughs, were invited to appoint local committees in accordance with regulations made by the Board of Trade. To these the Board of Trade has delegated power to investigate and hear complaints of alleged profiteering on the part of local retailers, and either to dismiss the complaint or to declare the price which would yield a reasonable profit, and require the seller to repay to the complainant any amount paid by the complainant in excess of such price. It is provided by the Act that the expenses of these committees will be defrayed by the local authorities out of local funds or rates.

Appeal Tribunals

Appeal Tribunals to hear appeals from the decisions of local committees, as provided by the Act, were appointed for each county or group of counties in England and Wales by the Board of Trade. Chairmen of county councils in England and Wales were invited to convene meetings of representative people to suggest to the Board of Trade names of suitable persons for membership of these tribunals. The Secretary for Scotland was asked to undertake, on behalf of the Board of Trade, the formation of Appeal Tribunals

for Scotland. The Irish Government was consulted as to the application of the Act in Ireland.

Thus it will be seen that two separate and distinct lines of action have been contemplated:

1. Central investigation by the central committee into the cost and profits of production and distribution of goods to which the Act has been applied.

2. Local investigation by local committees (subject to appeal as provided by the Act to Appeal Tribunals) into such complaints as may be made by members of the general public concerning the prices charged and the profits made in the retail distribution of goods to which the Act has been applied. In any case in which investigation discloses actual profiteering prosecution may follow.

It was an instruction of the Board of Trade to all committees and tribunals established under the Act, that no action shall be taken which will hamper or restrict legitimate commercial enterprise throughout the country. It is not the intention of Parliament, as expressed in the Act, to prevent any person or company from making a reasonable profit on their business transactions.

Setting Up the Machinery

The regulations for local committees and appeal tribunals were sent to some 2,000 local authorities, together with a circular signed by the President of the Board of Trade explaining the regulations, and a form to be returned within three days of the appointment of the local committee, with particulars of the persons appointed. These regulations were as follows:

The local committees will consist of not fewer than seven nor more than 25 persons. Two members should be women, three must be members of the local food control committee, and it is stated that it is imperative that the working classes should be adequately represented. Generally speaking it is desirable that cases should be heard by a body of not more than five persons.

In some places it may be convenient for the committee to sit in separate sections and at different centres, and sub-committees may therefore be set up, which must have one woman member and adequate representation of labor. These sub-committees will have all the powers of the local committees, other than that to take proceedings before a Court of Summary Jurisdiction. Where they think such proceedings should be taken they will report to the local committee.

All complaints to the local committee shall be heard in public, unless the local committee in any particular case, having regard to the interests of the parties and to all the circumstances, direct that the complaint or any part of the proceedings thereon shall be heard in private. The local committee may exclude the parties and the public at any time for the purpose of conferring upon any question affecting the decision of the complaint.

Questions before the local committee shall be decided by a majority of such of the members of the committee as are present and vote, but a member shall not take part in the consideration of, or vote on, any question relating to a complaint against a person with whom he is a trade competitor, or in which he is otherwise personally interested. A member shall not vote unless he has been present throughout the proceedings.

The Hearing of Complaints

The procedure laid down for the lodging and hearing of complaints requires a complaint to be made in writing to the office of the clerk to the local committee, within four days of the sale or transaction which is the subject of the complaint. Where the grounds of complaint appear insufficient, the committee may dismiss the complaint without calling on the respondent; but where a *prima facie* cause of complaint has been disclosed, the local committee shall hear the complaint, the complainant and the respondent being given at least three days' notice.

The local committee may summon any witnesses and take evidence on oath, and may call for the production of any documents relevant to the complaint. The complainant and respondent may conduct their own case, or may be represented.

If the local committee are satisfied that an unreasonable profit has been made or sought, they shall declare the price which would yield a reasonable profit, and shall require the seller to repay to the complainant any amount in excess, and they may take proceedings against the seller before a Court of Summary Jurisdiction. In declaring the price which would yield a reasonable profit, a rate of profit which does not exceed the fair average rate earned under pre-war conditions shall not be deemed unreasonable.

Seller's Right of Appeal

Any seller aggrieved by any order or decision of the local committee, other than a decision to take proceedings before a Court of Summary Jurisdiction, may appeal to the Appeal Tribunal for the area against the decision, and any order made by the local committee shall be suspended until the decision of the Appeal Tribunal.

Complaints relating to profiteering or alleged profiteering arising out of the retail sale of any article or class of articles of food or drink, to which the Act may be applied, shall be referred by the local committee to a special sub-committee to consist of five members, of whom not less than three shall be members of the local food control committee.

The regulations with regard to the Appeal Tribunals will in the main be the same as those for the local committees. A list of the Appeal Tribunals will be sent to the local committees in due course. Any appeals lodged against the decisions of the local committees before the list is circulated will be retained by the clerk to the local committee.

Wholesalers Charges

In his covering circular the President of the Board of Trade directs that if, on the investigation or determination of any complaint, it shall appear to the local committee or Appeal Tribunal, that the price charged or sought, about which the complaint was made, is in view of all the circumstances unreasonable, but that the unreasonable price so charged or sought was due to the price charged by the wholesale trader, the local committee or Appeal Tribunal should dismiss the complaint or allow the appeal as the case may be, and should refer the case to the Board of Trade.

Local committees and Appeal Tribunals should bear in mind that it is not the intention of the Board of Trade to take any action which will hamper or restrict legitimate commercial enterprise, or which will prevent any person or company from making a reasonable profit on their business transactions.

Formation of Local Tribunals

The establishment of local committees lagged in many communities, the local authorities being either luke-warm in the matter of profiteering, or else found no great clamoring on the part of the citizens for the appointment of a local committee, or for the punishment of profiteers. All told, about 1,000 committees out of a possible 2,000 have been appointed.

The selection of those to serve on local committees rests with the local authorities. The general principle governing appointment is that no member shall sit to consider a case in which the trader complained of is a competitor with him-

self. In some communities no traders are permitted to be members of the local committee. In at least one place the Town Council elected themselves *en bloc* to serve on the profiteering tribunal, but their act was protested against, it being stated that fifty per cent. of the town council are members of trades in which it is alleged profiteering takes place.

Complaints by the Public

It is generally true that the public has not complained to the extent that was expected, and in some places the local committees have had nothing to do. Various explanations are given for this apparent apathy on the part of the public. "People have become so used to high prices," said the Town Clerk of a London borough "that they do not realize yet what they can do to reduce them."

Many complaints made, while not frivolous, are useless, because they refer to things outside the articles scheduled. Typical of the complaints made are:

"A butcher's manager was summoned for making an excess charge of 4d. on a joint of veal. He was sentenced to prison for 21 days, his employer was fined £50 with costs, and a shopman was fined £5."

"A draper was ordered to refund 1½d. to a customer who had been charged 1s. 6¾d. per yard for 3 yards of sateen lining."

A complaint was made that a draper had charged 5½d. for a reel of crochet cotton of which the pre-war price was 1½d. The trader said the price was fixed by the makers, and the committee who considered the retailer's profit not unreasonable, but decided that the matter should be reported to the Board of Trade so far as the wholesaler is concerned.

Another complaint was an alleged charge of 5d. for 1 oz. of pepper, against the usual price of 2d. A charge of 8/- a lb. for chocolates as against 4/-, the price when this article was controlled.

Complaints have been made against the prices charged by restaurants, against the prices charged for the rent of gas meters, against the prices charged for coke, Epsom salts, pepper, clothing, false teeth, medal ribbons, military badges, toilet requisities, fish, cigarettes, and clocks.

Widening the Scope of the Act

It became apparent very early in the history of the operations and applications of the Profiteering Act that its scope required to be widened. As originally framed, the Act dealt with prices of articles "in common use," but excluded every variety of "services rendered." Also, the original list of designated articles or kinds of articles was found to be too narrow. Accordingly there has been a widening of the scope of the Act. The first schedule of the goods with the prices of which local committees had to deal was as follows:

Clothing and articles of personal use	Articles for sewing and knitting
Household goods	Furniture (not antique)
Building materials	Food

Subsequently, a supplementary schedule was issued, and includes among other things:

Books	Hay	Pencils
Gas meters	Toilet articles	Drugs
Stoves	Fountain pens	

Articles of food sold in restaurants and tea shops were included in the first draft of the first schedule, but these involve personal service and were, therefore, struck out. They are not likely to be reincluded in any new schedule. Nor is wine sold at restaurants at exorbitant prices. Wine is not regarded as an article "in common use," and in any case it can be bought more reasonably from a wine merchant. The difficulty of fixing a reasonable charge in a restaurant where the surroundings count for so much and involve considerable expense is felt to be insuperable.



From the "World," London

The New Invasion

Trusts in Great Britain

So far as publicity is concerned, it has concerned itself, in connection with the Profiteering Act, to the prices paid retailers by consumers. That is, it has had little to say about trusts, though the Act in its provisions includes trusts and the profiteering supposed to go with trusts.

That there are trusts and monopolies in Great Britain everybody knows, and probably they are increasing rather than diminishing in number; but the British public have not been incensed by their acts and power as have been the people of the United States in that country. Whether or not British trusts have been making the cost of living appreciably higher in their own country has not been established; yet they are under suspicion, and there is a demand and a machine for their investigation. The machine is the

Central Committee

authorized by the Profiteering Act, the chairman of which is Mr. C. A. McCurdy, as previously stated. The Committee consists of 119 members, and its composition is fairly representative of commerce, finance, co-operators, trade unionists, and the general public. It is the Parliament of the Profiteering Act.

It includes representatives of both employers and workpeople in the following industries: Food and groceries; agriculture, cotton, linen, wool, and clothing of all kinds; leather, boots and shoes; metal and hardware, including

(*Continued on page* 78.)

Canada's Industrial Expansion

A Record of Progress

Canadian Plant Now Operating

Kenworthy Bros. Co., of Stoughton, Mass., start Manufacturing at St. Johns, P.Q.

During the past month the branch plant which Kenworthy Bros. Co., of Stoughton, Mass., have erected at St. Johns, P.Q., started operations under the name of Kenworthy Bros. of Canada, Limited. They are manufacturing the same line of goods as in the United States, the principal product being a treated wool felt, which they call "Kendix," and which is used very largely as an insole in rubber and leather shoes. They also cut felt heel pads and box toes and handle all classes of felt, imitation leather, etc. The Canadian office and plant is in charge of Mr. A. P. Hittl.

Beaver Board Companies Expand

Thorold Plant being Extended by Addition of New Finishing Plant

At the Thorold plant of the Beaver Board Companies there is at present under construction a finishing plant, 125 x 362 feet, of brick, steel and concrete, mill type construction. The plant will have a capacity of 500,000 feet per day and will provide employment for approximately 100 men. The companies are also building a new office, 48 x 80 feet, of brick, wood and concrete. They expect to have these buildings finished and mills in operation by March 1. They are also extending their dwelling accommodation, having just finished three single houses and nearly finished seven double houses.

Structural Steel Mill

Algoma Steel Corporation Undertakes Establishment of an Important New Industry

It is now definitely announced that the construction of the proposed structural steel mill at Sault Ste. Marie will be proceeded with at once by the Algoma Steel Corporation. It will cost from $6,000,000 to $7,000,000, and will take from 12 to 15 months in building. When it is completed it is the hope of the Corporation that they will be able to supply the larger part of Canadian consumption of structural steel, of which at present 90 per cent. is imported from the United States. The new mill will provide work for 600 operatives.

Making Super-Cement

St. Mary's Cement Co. Have Started Manufacture of New Product for Canada

A new product for Canada is now being turned out by the St Mary's Cement Co., this being super-cement, the invention of an Englishman named Goddard. It was used effectively by the British Government during the war for petrol tanks and other construction work, and is a waterproof material with greater tensile strength than ordinary cement. Rights for Canada and the United States are held by Monk, Manhard & Dawson of Montreal, who will put up a plant for the manufacture of the special compound used with cement to make super-cement. For the present, this compound is being made in the St. Mary's plant, but it will ultimately be produced on a large scale for sale to cement companies generally.

New Paper Box Plant

Company Formed in Peterborough Leases Space for Establishment of New Industry

The increasing use to which paper is being put in the manufacture of all sorts of articles is attested by the growing demand for paper boxes. A new company, which starts out with a favorable outlook, is the Peterborough Paper Box Co., Limited, incorporated with an authorized capital of $50,000. The company have leased premises in the Grand Central Block on George Street. They occupy space 51 x 24 feet, three storeys high and the building has been renovated and equipped for the purpose. About fifteen or twenty hands will be employed at first, but so much encouragement has been received in the way of orders, even before operation has commenced, that rapid development is looked for.

Will Double Production

Regent Knitting Mills, Limited, Are Adding to their Plant at St. Jerome, P.Q.

The Regent Knitting Mills, Limited, are practically doubling the capacity of their plant at St. Jerome, P.Q., by placing an additional storey on their mill. This will give 7,500 square feet more manufacturing space in the old mill and the same area in the new worsted spinning mill. The addition will be completed and ready for operation about the middle of February. About 100 additional hands will be required, for the most part operators on knitting machines, and this will give the company a total of 375 employees. Production will be increased from about 700 dozen pieces weekly to 1,400 dozen pieces.

New Developments Planned

Following Reorganization of Alaska Bedding and Their Associated Companies

On December 15th last a reorganization of the Alaska Bedding Companies and their associated companies, the Ideal Bedding Co., Limited, Toronto, and the J. H. Sherrard Manufacturing Co., Limited, Montreal, took place. A closer alliance was formed with the Simmons Company, of Kenosha, Wis., and the Canadian companies, while under the same management as before, will be operated under the name of Simmons, Limited. In announcing the change, Mr. J. H. Sherrard stated:

"Some years ago our companies secured the Canadian rights to the Simmons bed patents, which resulted in a great improvement in metal beds made in Canada. Early this year (1919), we made an arrangement with the Simmons Company to import their new 'Top Line' of 'designed' light steel beds, and these have taken so well with the public that we



A London Enlargement

View of new building being erected by McClary Mfg. Co. for storage and shipping purposes

were compelled to plan for their extensive manufacture in Canada. In endeavoring to arrange for this, it became apparent that we could only obtain the full benefits of the Simmons products and advertising for our customers and the public by our amalgamation with the Simmons Company, and I am greatly pleased to inform you that this has been accomplished.

"The company management will remain unchanged. The writer will continue to direct its destinies as president. Mr. Bradshaw will be vice-president, in general charge of production, with Mr. Johnson in executive charge of sales. Mr. Abbott will continue his able management at Montreal plant, Mr. Browne at Toronto, Mr. Bromley at Calgary, Mr. Baker at Winnipeg, and Mr. MacLaren at Vancouver."

Additions and alterations are being made at the Montreal, Toronto, and Winnipeg factories to take care of increased business, and the executive have plans in view for further expansion, details of which are not yet ready for announcement.

New Printing Plant

Murray Printing Co., Limited, of Toronto, Propose to Erect Large New Building

As an evidence of how the printing industry is expanding, it may be noted that the Murray Printing Co., Limited, one of the oldest and largest printing companies in Toronto, are preparing to erect a new building which will greatly increase their present capacity. The site selected is at 192-194 Spadina Avenue, running through to Cameron Street and giving 60 x 205 feet of ground. The building will be six storeys high, of mill construction, equipped with the latest fire protection appliances and will contain about 36,000 square feet of floor space. The very latest printing machinery will be installed and it is hoped to have the building completed by about July 1.

Manufacture Moving Pictures

New Company Formed in Winnipeg to Undertake Local Development of Films

The Western Film Manufacturing Company are a new comcern recently established in Winnipeg for the manufacture of moving pictures depicting industrial, educational and agricultural subjects. Formerly such pictures taken in Western Canada had to be sent east to be developed. Premises, consisting of a two-storey building, 30 x 80 feet, on Manitoba Avenue, have been secured and about $30,000 invested in the business. The president of the company is Mr. P. J. Hamilton, who was formerly connected with the Pathescope Co. of Canada.

More Space Required

Sam'l. Osborn (Canada), Limited, are Erecting Building for Warehouse and Office Purposes

A new building, 120 x 80 feet, and costing approximately $40,000, is being erected at the works of Sam'l. Osborn (Canada), Limited, in Montreal. It will be utilized for the warehousing of steel bars, wire rope and the various products which this company have for sale. A small portion will be used as a demonstration plant for the heat treatment of steels, and a few machines will be installed for this work. Office accommodation will also be provided in the new structure.

A Million for Extensions

The National Farming Machinery, Limited, Goes in for Extensive Additions

About a million dollars will be spent on extension and new equipment by the National Farming Machinery, Limited, of Montmagny, P.Q., who have taken over the plant and business of the General Car and Machinery Works, Limited.. They will continue the manufacture of steam engines and boilers, saw-mill machinery, wood-working machinery, and good-roads machinery, and will operate steel, iron, brass and aluminum foundry, but in addition they will make agricultural implements and gasoline engines, and for this purpose are making the extension mentioned. A small rolling mill in connection with the steel foundry is also being erected. Some departments will be producing within a few weeks, others not until May or June. It is expected that from 1,200 to 1,500 men will be employed.

Planning General Expansion

Northumberland Paper & Electric Co., Limited, Have Large Building Program

The majority of the capital stock of the Canada Boxboard Co., with mills at Montreal and Frankford, Ont., has been acquired by the Northumberland Paper & Electric Co., Limited, Campbellford, Ont. Some form of organic union will probably be worked out, but no details have yet been arranged. In the meantime the properties of the Canada Boxboard Co. are being operated by the Northumberland Paper & Electric Co. very much along former lines. It is the company's intention to build a new plant in Toronto, work on which will be commenced early in the spring. They are now enlarging the plants at Campbellford and Frankford, as all three mills at Campbellford, Frankford and Montreal are very much behind their orders, and are unable to keep up to the present demand.

Rebuilding Box Factory

Factory at Bedford, N.S., Operated by Moir's Limited, to be Restored After Fire

Moir's Limited, biscuit and confectionery manufacturers, Halifax, whose sawmill and wood box factory at Bedford, N.S., was destroyed by fire on November 14, will rebuild the plant. The building was 160 x 60 feet, two storeys, with an "L" at one end to give sufficient length for sawing logs conveniently. The company's plans do not provide for any enlargement of capacity at present, as a building the size of the burnt one will give ample room to take care of requirements for some time to come.

The mill which was destroyed was comparatively new and equipped with modern machinery, it having been built in

1911. Since that time there have been improvements both in the class of machinery and in the method of handling lumber for box-making and it is the company's intention to put in the very latest and best machines available. It is quite likely that motor drives will be installed, as there is a water-power developed at the plant.

Needle Manufacturers Expand

The Torrington Co., Limited, Upper Bedford, P.Q., Acquire Additional Property

Announcement is made by the Torrington Company Limited, Upper Bedford, P.Q., manufacturers of knitting machine needles, that they have recently purchased the property of the Bedford Stove Company, adjoining their present location. This will be used to extend their factory, though they will not use the buildings now on the adjoining property, but will demolish them in the spring and erect a modern factory building. Nothing definite regarding the latter development has been decided yet, and no plans have been drawn up. At present the company are only manufacturing knitting machine needles, but they will put in other lines which they are manufacturing in the U.S., as soon as possible, including screws and rivets, electric vacuum cleaners, and other electric appliances.

Extend Toronto Plant

Canadian Fairbanks Morse Co., Limited, Making Additions to Their Toronto Factory

In a recent interview with Mr. H. J. Fuller, president of the Canadian Fairbanks, Morse Co., Limited, Mr. Fuller advised that the additions being made at Toronto factory are to meet new Canadian demands. Following the manufacture of munitions, the plant was quite exhausted, and it was necessary to put in almost entirely all new equipment to keep step with the anticipated growth of the Dominion.

"We have not the orders in sight, but we are anticipating that Canada will develop and its demands are going to be very large in the future," said Mr. Fuller. "We are enthusiastic over the future, and are willing to invest our money and if we cannot immediately use all of our facilities, the time is not far off when they will be required. The extensions are to take care of our large engine business. This is distributed through our branch houses in every part of the Dominion of Canada."

The New Pedlar Plant

Oshawa Industry Soon to be Housed in Complete New Factory Building

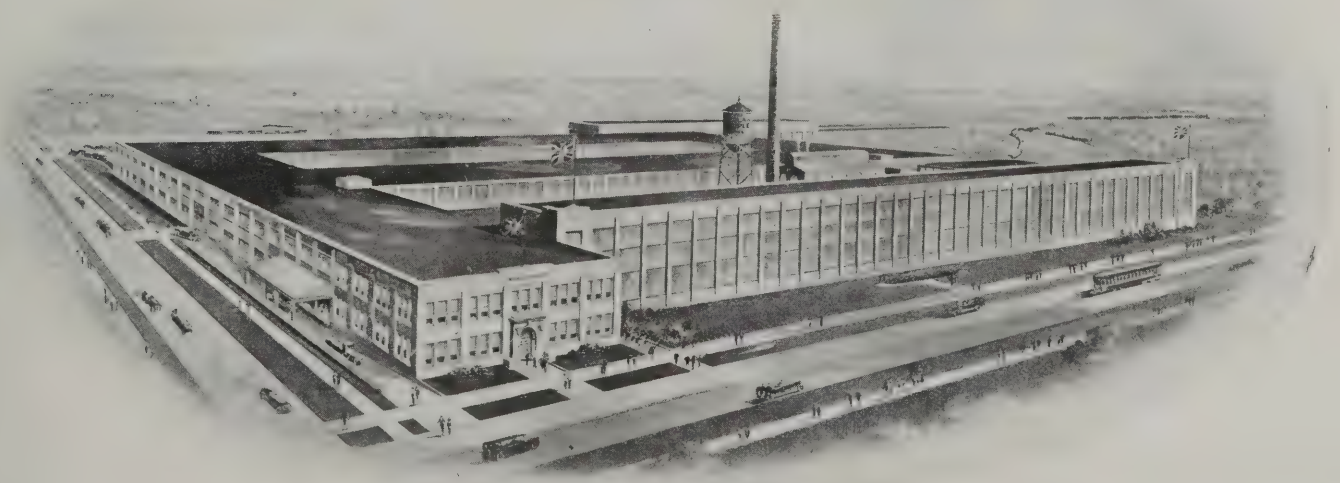
Work is now progressing on the erection of the new plant which the Pedlar People, Limited, of Oshawa, are erecting to take the place of their present inadequate premises. The site secured for the new building is on Simcoe Street between the C.P.R. and G.T.R. tracks. It will be 440 x 365 feet, of brick, steel and cement construction, 2 storeys in height, and so arranged as to facilitate the movement of the product continuously in one direction from raw material to the shipping department.

The Pedlar business was established in 1861 by the late George Henry Pedlar, assisted by his father, the late Henry Pedlar. Although new buildings were constructed from time to time until a large area was occupied, the success of the company has been so great as to completely outstrip all possibility of extension on the old site. Accordingly a complete new plant was decided upon and this will be occupied next year when completed.

Capacity Taxed to Utmost

Brantford Cordage Company, Limited, Preparing for Necessary Expansion

A new storage warehouse is at present under construction by the Brantford Cordage Company, Limited, manufacturers of Maple Leaf binder twine and cordage. It is 400 x 90 feet, of steel and brick construction, and provided with sectional fire-walls and full sprinkler equipment. The company



The Pedlar People, Limited's Big New Plant

This plant is now in course of erection at Oshawa and when completed will appear as in the above illustration. It will comprise a building 440 x 365 feet, two storeys in height, of brick, steel and cement construction

have also purchased an additional two and one-half acres of land adjoining their present mills, providing for further expansion in the near future. Present capacity is approximately 10,000 tons of binder twine per annum, and, notwithstanding the fact that they are in open competition with the world and without any tariff protection, their products have become so popular that present capacity is taxed to the utmost.

Monarch Knitting Expands

Additions Being Made to the Company's Factory at St. Catharines Now Nearly Complete

The Monarch Knitting Co., Limited, expect to have the addition to their factory at St. Catherines ready for operation by March 1st. The building itself is now complete, the sprinkler and heating systems are being installed and the machinery should be ready within the next few weeks. The extension is three storeys in height, of red brick construction, and contains about 30,000 sq. feet of floor space. The ground floor will be devoted to office purposes and recreation room for the girl employees. The first floor will contain the hosiery knitting machines and the second floor the sweater finishing department.

Knitting Mill Enlargement

Plant of Joseph Simpson Sons, Limited, Toronto, Receives Needed Extension

To relieve the pressure in their main plant on the Esplanade, Toronto, Joseph Simpson Sons, Limited, knit-goods manufacturers, are erecting a building on King Street East, which will be devoted entirely to carding and spinning. It will be 90 x 190 feet, three storeys high, of brick and mill construction. It is expected that it will be ready for operation by about July 1. When completed, from 50 to 75 new hands will be required.

Gear Company Will Move

The Hamilton Gear & Machine Co., Toronto, Plan Better Service

The Hamilton Gear and Machine Co., Toronto, now located at the corner of Concord and Van Horne Avenues, expect to remove their whole gear shop in the spring to the modern buildings at Nos. 62-84 Van Horne Avenue, formerly occupied as shell shop and tractor shop. The latter have a floor space about 2⅓ times greater than the present gear shop, and have the additional advantage of being all on one floor. The tractor shop is a fine building of concrete truss, saw-tooth roof construction, the only one of its class in Canada. The move will be greatly to the advantage of the company and their customers, who will receive improved service.

New Concentrating Mills Planned

Consolidated Mining & Smelting Co. of Canada, Limited, have Important Plans

Two exceedingly knotty problems have recently been worked out by the experts of the Consolidatd Mining & Smelting Co. of Canada, Limited, which will lead to the erection of two large concentrating mills in British Columbia. One of these problems concerned the concentrating of the low grade copper ores of the Rossland Mines. As a result of the success of experimental work the company will build a mill at Trail or Rosslands, treating 1,500 tons of ore a day and costing about $800,000. The product from this mill would be a copper concentrate which would be smelted in the existing copper blast furnaces. The second problem concerned the concentrating of the low grade silver lead zinc ores of the Sullivan Mine at Kimberley. A mill with a capacity of 2,000 tons of ore per day will be erected. The product will be lead and zinc concentrates, both of which will be shipped to the Trail smelter for treatment in the existing zinc plant and the existing lead smelting and refining plant. The market for the increased output of copper which the above developments will entail is already at hand in Canada. For the zinc and part of the lead export markets will have to be sought.

Broom Company Re-organized

St. Lawrence Broom & Brush Co., Montreal, Turning Out 700 doz. a Week

The St. Lawrence Broom & Brush Co., Montreal, have recently been re-organized. Mr. Rodrique Langlois has bought out the interest of one of the old partners. He has put enough capital into the business to allow of having all the buying done on a cash basis. Output will be about 700 dozen a week. Twenty men will be employed regularly and the company to raise output shortly to 800 dozen a week.

Locate in Brockville

Jireh Food Company Removing Their Industry From Maitland to Brockville

Reorganization of the business of the Jireh Food Co., whose milling plant was located in Maitland, Ont., has been effected and the company are now operating in Brockville. They have occupied a vacant building and have started the manufacture of their Jireh breakfast food, with a line of diabetic flour as a side line. The company will employ at the outset about fifteen hands, but expect to add to this number as the business expands. The principals of the company are Newell L. MacDowell and Merrill W. McDowell, both of whom have splendid overseas records to their credit.

More Warehouse Space

Dominion Road Machinery Co., Limited, will be Enabled to Increase Production

Ratepayers of Goderich voted favorably January 5 on a by-law exempting the Dominion Road Machinery Co., Limited, from taxes, other than school taxes, for ten years. The company have recently completed a warehouse, 40 x 100 feet, with travelling crane. This additional storage room will permit of their manufacturing during the winter months and having a larger stock of machines ready for shipment in the spring when municipalities demand the machines for spring work.

Will Erect Office Building

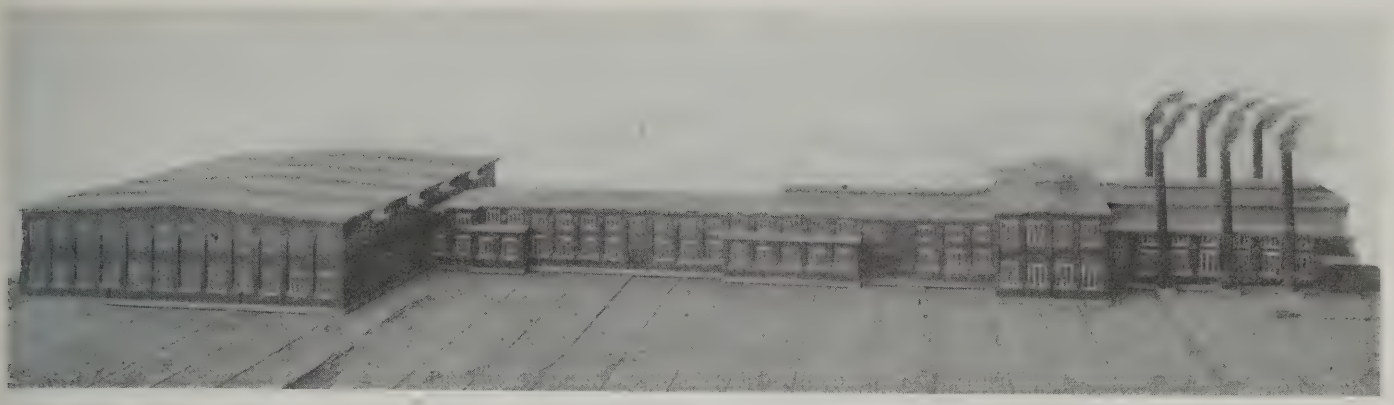
The Galt Knitting Co., Limited, Galt, have Plans for Welfare Work in New Building

The Galt Knitting Co., Limited, Galt, Ontario, manufacturers of underwear and knitted specialties, have plans ready for the erection of an office building adjoining their mill. This will be 50 x 75 feet, two storeys in height and of concrete construction. The lower floor will have commodious office room, while the upstairs will be devoted to rest room, cloak and dining rooms for female employees. The company expect to commence construction about April 1st, and hope to have everything completed by midsummer.

Several Extensions Planned

Dominion Canners, Limited, Have Quite a Programme of Building in Prospect

Several developments are either under way or being considered by the Dominion Canners, Limited. At Strathroy they are just completing a new factory and warehouse to replace a factory that was burned down. The buildings are



Dominion Iron & Steel Company's Ship Plate Mill

Model of the New Mill at Sydney which has been under erection for two years and which will probably start operations this month

three storeys high with basements, and are built of concrete and red pressed brick, costing in the neighborhood of $150,000. The company are contemplating some alterations at Dunnville, owing to the buildings there being somewhat old and dilapidated. There are some minor alterations at one or two other factories, principally in the way of extending warehouse capacity. They are also figuring on a new factory in Hamilton to replace the present jam factory, which is not large enough for requirements. The latter extension, however, has not been finally passed upon by the board.

Ship-Plate Mill Nearly Ready

Five Million Dollar Plant at Sydney Expected to Start Operating in February

It is expected that rolling operations at the new ship-plate mill of the Dominion Iron and Steel Co., at Sydney, N.S., will commence towards the end of February. The erection of the mill was started in June 1918. The rated capacity is 50,000 square feet of half-inch plate in 25 hours, equivalent to 500 tons daily or 12,000 tons per month. The mill is equipped to roll between 3-16in. to 2¼in. gauges in widths up to 98in. and lengths up to 80ft.

The mill has been the direct outcome of the Dominion Government's shipbuilding policy. The Government will guarantee a tonnage at a price sufficient to recoup the steel corporation for its outlay. The original price arranged was $4.15 per hundred pounds for standard ship-plates, plus extras for unusual shapes. Subsequently the price was revised to $3.65 per hundred pounds. The agreement, as revised, calls for 250,000 tons of plate delivered over a period of five years, with Government option to increase the tonnage to 375,000 tons, not less than 50,000 tons to be supplied annually.

Two Shawinigan Plants Join

Electric Furnace Plant and Iron Foundry to Operate at Shawinigan Factories, Limited

The electric furnace plant of Fraser Brace and Co., erected at Shawinigan Falls during the war, and the iron foundry of Normandin Bros. have been acquired by new interests, and on January 1 commenced operations as the Shawinigan Foundries, Limited. G. G. Macartney, who operated the electric furnace plant for Fraser Brace and Co., is president; W. G. Dauncey, vice-president and metallurgist; and Captain C. M. Hall, secretary-treasurer. It is intended to continue the manufacture of pig-iron in one electric furnace pending developments which may lead to the production of ferro-alloys and special steels in the near future. Extensions are contemplated so as to enable the iron foundry to cope with the demand for the ordinary run of castings in such an industrial centre. Arrangements have also been completed for carrying on brass foundry work on a large scale and to put a special grade of semi-steel casting upon the market.

Doubling Plant Capacity

Canadian Hart Accumulator Co., Limited, Are Making Addition to Their Plant at St. Johns

An addition which will considerably more than double the capacity of their factory at St. John's, P.Q., is just being completed by the Canadian Hart Accumulator Co., Limited. The original factory was of mill construction, one storey high. The addition is of the same type of construction and will nearly double the size of the plant. The company's product consists entirely of storage batteries for various classes of work including batteries for electric power stations, telephone stations, fire alarms, electric railways, farm lighting, electric train lighting and automobile starting and ignition.

Woodstock Developments

List of New Industries Which Have Started Operations During the Past Year

In reviewing the year's work at the annual meeting of the Woodstock Board of Trade at which he was unanimously re-elected to office, the president, E. A. Rea, gave the following information about industrial developments during 1919:—

The Woodstock Paper Box Company have located in the Stone property on Dundas Street, and are now employing a good number of hands. We expect to see this number largely increased during the present year. The operation of this plant has proved a decided advantage to local manufacturers using their products.

The Orange Products Company have taken over the Tobin Arms Factory and are now making marmalades. They are employing a good number of hands, and expect to increase this number.

The Woodstock Worsted Spinning Company started operation during the year and are now employing many hands.

The DeLong Hook and Eye Company have located a branch in the city on the property of Mr. A. Thompson on Finkle Street, and are now employing fifteen to twenty hands. If the labor is available they may add considerably to this plant, and decide to locate their Canadian headquarters in Woodstock.

Bean and Westlake, Limited, have built an addition to their already splendidly equipped plant.

Hosiers, Limited, have built an addition to their factory and will shortly be employing many more hands.

The Harvey Knitting Company are adding an addition to their already large plant.

Hay & Co. have added an addition to their plant and have now a larger payroll than ever before in the history of the company.

The Linderman plant, which was closed for some time, is again in operation, and we expect to see this factory employ a large force of highly skilled, well paid mechanics.

On the recommendation of the Board of Trade the City Council submitted two industrial by-laws to the ratepayers, which were carried by overwhelming majorities, and with the result that we expect to see the Warren & Son Organ Co.,



Inside the Ship Plate Mill

Showing section of the hot bed looking north towards mill or motor pinions in the distance

Limited, occupy the Woodstock Lumber Co. building after making alterations to the factory which will make it thoroughly modern in every respect. They will employ many high paid mechanics.

The Brunswick Canadian Products Co., Limited, will start their large factory just as soon as weather conditions will permit. This will be one of the largest industries in the city, and will employ 200 or more men.

The electors will be called upon in a few days to vote on a by-law to assist the Karn Piano Co., Limited. I have every confidence in the men behind this proposition and hope to see this by-law get as large a vote as was accorded the other two in December last. I am sure it will be a great satisfaction to the citizens to see the Karn-Morris plant again humming with industry and employing more men than ever before.

Branch Plant in Dundas

J. R. Moodie & Sons, Hamilton, Have Leased Factory for Expansion

To assist in knitting and finishing their goods, J. R. Moodie and Son, Limited, Hamilton, who operate the Eagle Knitting Co., Limited and the Eagle Spinning Mills, Limited, in Hamilton, have established a small branch plant in Dundas. They started with fourteen hands, but expected to increase the number before very long.

Organized New Company

Dominion Bridge Co., Limited, Have Formed Subsidiary for Manufacture of Paper Mill Machinery

In the directors' report presented to the annual meeting of the Dominion Bridge Co., Limited, the following information was given relative to the company's activities in the manufacture of paper-making machinery:—

"The demand for paper-making machinery, alluded to in the last report, has outgrown the capacity of your shops at the Lachine Works, where its manufacture was being carried on, and your Company has purchased the land and shops of the St. Lawrence Bridge Company (built for the fabrication of the Quebec Bridge). A foundry equipped to turn out the special castings required for paper-making machinery and also for the heaviest class of general castings has been added. The tools and machines now used for making paper machinery are being transferred from your works to the new plant and the shops of that plant are generally being equipped for the manufacture of paper-making machinery, as well as for special foundry and machine shop products for which there is not now capacity in Canada.

"It was considered advisable to segregate the operations of the new plant from your Company and to incorporate a new Company under the name Dominion Engineering & Machinery Company, Limited, to take over the shops and equipment, the paper machinery business and other business for which these shops would be specially equipped, with an issued capital of $2,500,000.00. Your Company has acquired all the shares of the new Company.

"The purchase of the plant of the St. Lawrence Bridge Company, has resulted in the winding up of that Company and its assets are in process of distribution."

Build New Forging Department

General Forgings & Stampings, Limited, go in for Automobile Forgings and Stampings

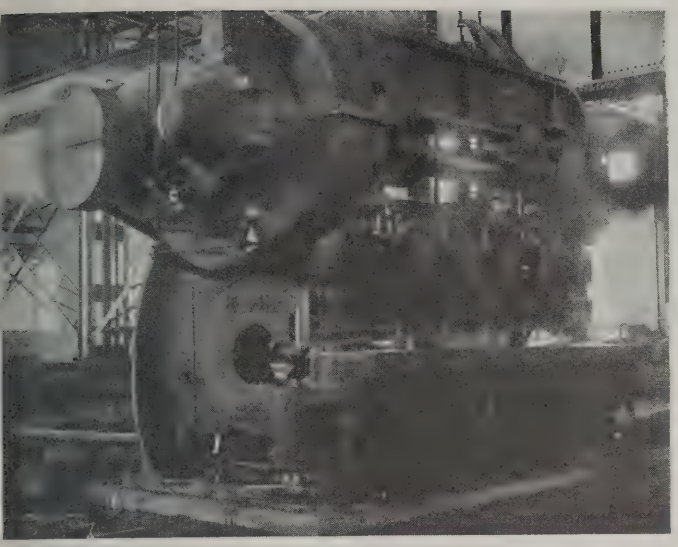
General Forgings & Stampings, Limited, which is the new name of the Canada Pole & Shaft Co., Limited, Merritton, are at present building a complete new forging department in addition to their present plant, and this will when completed be the most up-to-date forge shop that can be devised. The change of name has been found very necessary owing to the fact that for some time past the nature of the business has been changing from that of a pole and shaft and woodworking business to that of a forging and stamping business. For a considerable time the company have been operating only on automobile forgings and stampings and from now on will devote the entire plant to this product. All officers and connections are the same as before.

Company Changes Name

Galt Robe Company of Galt, Ontario, will be Known in Future as Stauffer-Dobbie, Limited

A change in the name of the Galt Rubber Co. took place at the first of the year. It will now be known as Stauffer-Dobbie, Limited. No change in ownership or management has been involved, the former partners and officers continuing to own and control the company. Mr. Geo. A. Dobbie is president; Mr. Jos. Stauffer, vice-president and treasurer; and Mr. James H. Bennett, managing director.

The company was established originally in 1903 for the purpose of manufacturing imitation buffalo robes. By degrees other lines were added, such as lap dusters, hammocks, furs and fur products. In 1912 the original mill was completely destroyed by fire, and the present three-storey buildings were erected. Further new lines were added, such as Turkish



155-inch slitting shear



108-inch cutting off shear

Two Mammoth Machines in the Ship Plate Mill at Sydney

towels, kimona cloths, art blankets, rugs and comfortables. As robes are no longer the chief product, it was deemed advisable to change the name of the company.

The company have been adding new machinery as fast as it has been possible for them to secure it, and they have at the present time twenty-five new looms coming from the United States; twenty of these will be put on Turkish towels, which will bring their equipment in this department up to seventy-five looms; the other five will be put on special kimona cloth, which is the company's latest line. They expect that within a year's time the capacity of their mill will show an increase of fifty per cent.

Will Double Capacity

Canadian Connecticut Cotton Mills, Limited, Will Make Large Addition to Their Sherbrooke Factory

Financial arrangements are now being made through the sale of $3,000,000 of 8 per cent cumulative preferred stock which will enable the Canadian Connecticut Cotton Mills, Limited, to erect an addition to their plant at Sherbrooke, Que., increasing its capacity by about one hundred per cent. The new addition will contain 400,000 sq. feet of floor space and will be built of brick and steel with modern lighting, heating, and plumbing. The new mill will be devoted to the manufacture of automobile tire fabrics, furnishing employment for about 900 operators. The company expect that it will be completed early next fall.

New Clothing Company

Climax Clothing Company, Limited, Will Start Operations in Arnprior During March

Messrs. J. T. Griffith and N. L. McNaughton, who were in business in Arnprior, Ontario, under the name of Griffith, McNaughton, Limited, and who sold out their business a few months ago to F. C. Huyck, of Albany, New York, have formed another company under the name of Climax Clothing Company, Limited, with a capital of $100,000. They have purchased a building in the town of Arnprior, 75 x 30 feet, three storeys and basement, and are installing new machinery for the manufacture of men's and boys' ready-made clothing, ladies' and children's stockings and men's half-hose, to be manufactured in cashmere and worsted yarns on automatic machines. The plant is being equipped for a production of $250,000 per annum. Mr. F. Rutherford is to be mill manager, and they will employ about eighty hands, starting about the middle of March. Mr. J. T. Griffith is the president of the company; Mr. N. L. McNaughton, vice-president and secretary-treasurer; and Mr. A. A. McNaughton, accountant.

Have Made Improvements

Wilson Canadian Company, Limited, Are Now Operating Their Packing Plant in Chatham, Ontario

The Wilson Company, the big Chicago packers and provisioners, who took over the plant of the Chatham Packing Company last fall, have already made considerable improvements to the plant and are now in a position to handle 750 hogs per day. This capacity can be increased as the supply of live stock in the Chatham district warrants. The company, which is operating in Canada under the name of Wilson Canadian Co., Limited, state that they are going to lend their support at all times to the stimulation of the growth of live stock so that they will be enabled to increase the capacity of their plant still further.

Stationery Manufacturers Enlarge

National Paper Goods, Limited, Hamilton, are Adding Approximately 12,000 square feet to Their Factory

An addition to the factory in Hamilton of the National Paper Goods, Limited, manufacturers of envelopes, tablets, papeteries, etc., is at present under erection. The addition is 52 x 70 feet in area, three storeys high, and will contain approximately 12,000 square feet. It is being erected for the purpose of increasing capacity in the company's stationery manufacturing department. It is anticipated that the building will be completed on or about April 1st, and from 25 to 35 additional employees will be taken on.

Turn to Page 122 for Additional Industrial Expansion Information

Freight Claims and Their Collection

The Shippers' Problems—Liability After Delivery of the Goods to the Carrier—Handling Claims for Customers—Attitude of the Sales Department on Question of Claims

By F. R. ALLWARD
Transportation Department, Canadian Manufacturers Association

Third Article

THERE is a widespread opinion among the shipping public that once the bill of lading is signed the carrier is liable for any loss or damage that may be discovered on delivery of the consignment at destination, but this is not true where the goods are hidden from view. For example: in the case of an L.C.L. shipment of shoes the receiving clerk at the freight sheds may sign for two cases, but he has no opportunity of verifying the contents, and the fact that several pairs are found short on unpacking by the consignee is not conclusive evidence that they were pilfered while the consignment was in the hands of the railway.

There are other instances where a concern may be handling certain classes of goods in the capacity of broker, and for the sake of convenience they are never opened but are shipped out in the original package to their customers. Under such circumstances it would be manifestly unfair to hold a railroad company responsible for loss or damage, especially where the record of handling produced by the Claims Department does not show any evidence of damage or opportunity for pilferage. The courts, our law makers, and other regulating bodies have recognized the fairness of this view and in the present standard bill of lading the Board of Railway Commissioners for Canada has approved the following provision:

> "Received subject to the classifications and tariffs in effect on the date of issue of this original bill of lading..... the goods described below in apparent good order, except as noted (*contents and condition of contents of packages unknown*).

If we are to recognize the fact that brokers and other middlemen cannot unpack all case goods they receive for distribution (private brand goods in particular), then it devolves upon the manufacturer to establish such a system of packing goods that his employees can consistently make a sworn statement as to the contents and condition of any one consignment, should the occasion arise. However, it is not always necessary to follow this procedure where the manufacturer can convince a representative of the Claims Department that under the system adopted in his factory or shipping room the opportunity for error in packing is negligible.

As regards the number and outward condition of the packages a clean bill of lading holds good in the case of L.C.L. shipments or carload shipments loaded on public team tracks (when a checker is provided), but the railway claim departments are not prepared to recognize this view where carload shipments are loaded by the manufacturer on a private siding.

Cars Loaded on Private Sidings

Some three years ago the Canadian railways notified shippers in all the large terminals that they would no longer continue to supply checkers for shipments loaded on private sidings, on the grounds that men were scarce and that the labor costs were not warranted by the results obtained. They offered as a substitute to provide the shipper with car door seals, to give clean bills of lading, and to investigate all claims for damage or shortage in the same manner as in the past. It has been found, however, that the railways are not prepared to carry out the agreement as regards claims for shortage, especially if they are able to produce what purports to be a clear seal record. Unfortunately the carriers cannot be compelled by law to supply a checker, and for his own protection as well as in the interests of his customers the shipper should establish a most careful method of checking and should keep a record of the same in such shape as will admit of its being accepted in a court as *bona fide* proof of the correctness of his invoice and bill of lading. At least a double check of the goods going into a car should be established and a careful record made of the seals placed on the side doors as well as the small windows on the end of the car.

The practice of giving the seal numbers of carload shipments to railroad employees should not be countenanced, unless the shipper is satisfied that the information will not prejudice in any way a claim for shortage of goods. Seals are placed on car doors to protect the contents from pilferage, and in taking a record of the numbers a car checker is supposed to examine the seal for the purpose of detecting any sign of tampering. It will be readily understood, therefore, that the shipper who permits his staff to furnish railway employees with the record of seals protecting his shipments is encouraging the checker to neglect his duties.

Ownership in the Goods

As far as a railroad company is concerned, a consignment of goods covered by a straight bill of lading becomes the property of the consignee immediately that document is signed by the carrier's agent (in the absence of notice to the contrary) and the said consignee is the only party who can legally collect reimbursement on a claim for damage or non-delivery. This is not, however, the controlling factor as between the shipper and his customer. The extent of a shipper's responsibility is covered entirely by the terms of sale and as there is more or less controversy on this question it would be well for the seller to have a clear understanding with his customer based on the following terminology:

(1) When the price quoted applies only at shipping point and the seller merely undertakes to load the goods on or in cars furnished by the railroad company serving the industry or most conveniently located to the industry without other designation as to routing, the proper term is:

> "F.O.B. (name point of origin)"—F.O.B. mills, works or factory; all have the same meaning and obligations.

(2) When the seller quotes a price including transportation charges to destination without assuming responsibility for the goods after obtaining a clean bill of lading at point of origin, the proper term is:

> "F.O.B. (name point of origin)"—"Freight prepaid to (name point of destination)."

(3) Where the seller wishes to quote a price from which the buyer may deduct the cost of transportation to a given

point without the seller assuming responsibility for the goods after obtaining a clean bill of lading at point of origin, the proper term is:

"F.O.B. (name point of origin)"—"Freight allowed to (name point)."

(4) The seller may desire to quote a price covering the transportation of the goods to destination, assuming responsibility for loss and for damage up to that point. In this case the proper term is:

"F.O.B. cars (name point of destination)."

(5) It may be that the goods on which a price is quoted covering the transportation of the goods to destination constitute less than the carload lot. In this case the proper term is:

"F.O.B. cars (name point of destination) L.C.L."

(6) Should the seller be located at a point where the railways provide regular cartage service, and he wishes to quote a price on a less-than-carload lot, freight and cartage charges collect, without assuming any responsibility after obtaining a clean bill of lading from the carriers' cartage agents, the proper term is:

"F.O.B. warehouse (name point of shipment) L.C.L."
—F.O.B. mill, works or factory all have the same meaning and obligations.

It has been stated above that the consignee is the only party who can legally recover reimbursement on a claim for damage or non-delivery when a shipment of goods is covered by a straight bill of lading, but it has always been the practice for Claim Departments to entertain a claim from either the shipper or the consignee providing the original bill of lading (or bond of indemnity, in lieu of lading) is surrendered with the claim Similarly in a court action the shipper, in order to prove his right to recovery, need only produce his sale records showing that he held ownership in the goods until delivery to the consignee.

Handling Claims for Customers

The small town general merchant, brokers and the smaller wholesale distributing houses undoubtedly have little experience or knowledge of the proper procedure to follow in obtaining reimbursement for loss and damage claims from the railways, and as a matter of service many manufacturing concerns long ago adopted the practice of handling claims for their customers. Competition in trade has made it necessary for other dealers to follow suit, with the result that the majority of merchants now look to the shipper to credit their account for any loss or damage that may be found to exist on delivery of the shipment.

The most regrettable feature is the lack of co-operation shown by many dealers in failing to furnish the shipper with the evidence required to substantiate a claim on the carrier. This is apparently due to the popular belief that the shipper is legally responsible for the safe delivery of the goods at destination; but even from an ethical standpoint a dealer cannot consistently expect to obtain reimbursement for loss or damage to his goods unless he is prepared to furnish evidence in support of his claim.

Many firms hesitate to insist on the consignee furnishing the required proof for fear of offending their customers, but instead attempt to cast the onus on the railways by filing claims for every alleged case of damage or shortage reported by the dealer. This is certainly not fair to the railways and is apt to cause the claims agent to look with suspicion on every claim filed by the said shipper.

If manufacturers desire to avoid considerable losses they should get away from the practice of assuming responsibility for the safe delivery of goods at destination. Undoubtedly it is good policy as a service feature for a concern to handle claims for customers, but if this policy is followed the shipper should have it distinctly understood that negotiations with the railway claims department will be conducted *only* in behalf of the consignee and not because he (the shipper) is legally responsible; and furthermore, that credit will not be allowed until settlement is obtained from the railroad company.

Attitude of Sales Department

The shipper's sales staff may at first take strong exception to adopting such a policy on the grounds that it will antagonise the trade. This need not be so if the task of educating customers in their duties and obliagtions as receivers of freight is assigned to a good correspondent well trained in the art of business diplomacy. He should be able to find ample material for his purpose in the second article published in "INDUSTRIAL CANADA" for January; and as regards carload shipments for small stations it might be well to point out that the railways do not always make the practice of supplying a checker for shipments unloaded on a public team track. In that event the consignee should be cautioned to take extreme care in checking out the contents and also to examine the seals on the doors to determine whether or not they have been tampered with en route.

How to Prevent Claims

This article completes the series on "Freight Claims and Their Collection" and will be followed by an article on "How to Prevent Claims," dealing with them from a Shipper's Standpoint—such as Marking, Packing, etc.

Loss and Damage Express Claims

New Instructions Issued by American Railway Express Co. to its Claims Agents

In a circular recently issued by the National Industrial Traffic League, members are advised that the following new instructions have been issued by the American Railway Express Company to its claims agents regarding the settlement of loss and damage claims presented against the American Railway Express Company:—

"The following instructions will govern the settlement of loss and damage claims presented against the American Railway Express Company:

"(1) The date that written or verbal request is made by shipper, consignee, or other interested party, to trace a shipment, shall be considered as the date of claim, but verbal requests will be considered only when and as of the date substantiated by the Company's records made in writing.

"(2) Except as noted below, no claim for total or partial loss, or concealed damage, shall be paid which is not presented within four months after delivery of shipment, or, in the case of failure to deliver, then within four months after a reasonable time for delivery of shipment has elapsed.

Exceptions:

"(*a*) Where claim is made on account of loss of a C.O.D. shipment, the claimant shall be allowed forty days, in addition to the four months in which to file his claim. This based on the fact that we do not accept tracers for C.O.D. shipments within forty days of date of shipments unless shipper produces evidence that shipment has been delivered and paid for. When not presented within this extended period, decline.

"(*b*) Where C.O.D. shipment has been delivered and money collected, or where shipment is receipted for as C.O.D. and delivered without collecting C.O.D., claim should be paid regardless of whether or not presented within four months from date of delivery.

"(3) On account of difficulty in determining where or how delay or damage occurred, we will take the broader view and interpret the four months' clause as not applying to claims for delay, or claims where the damage to the shipment is apparent.

"(4) When, at the expiration of two years and one day after delivery of shipment, or in the case of non-delivery,

two years and one day after a reasonable time for delivery, claim has not been adjusted or declined in writing, and suit has not been commenced, claims shall be referred by Claim Agents to Superintendents of Claims, to be reviewed by them. Such claims will be paid only when, in the judgment of Superintendents of Claims, the Express Company was responsible for delay in settlement."

S.S. Service to Brazil

Monthly Sailings Started in January by the Canadian Government Merchant Marine

Canadian National Railways export and import department advise that they have inaugurated a service from Canadian Atlantic ports to Pernambuco, Rio de Janeiro and Santos on the East coast of Brazil which will be served by the same steamer as is now running to Buenos Ayres. The first sailing from Halifax was about January 25th; and the monthly service will be continued thereafter when cargoes offer.

There would appear to be a great desire on the part of the people of Brazil to do business with Canadians, and it is hoped that all manufacturers who can take advantage of this service will support it to the utmost.

On the January 25th sailing, there was a quantity of codfish, malt and newsprint paper. It is hoped that a larger trade may be developed in other manufactured articles.

Express Co. Liability

The Proposal to Modify the $50 Limit in Case of Loss or Damage

The provision in the express receipt limiting the liability of the company to $50 in case of loss or damage has been under consideration for some time, the proposal being to amend this clause to provide that in the case of shipments having an actual weight in excess of 100 lbs., the liability will be limited to 50 cents per lb. In other words, on a shipment of 200 lbs. the claimant would be able to recover $100, but under the present arrangement he can obtain only $50. Negotiations have been carried on with the express companies, but the Express Traffic Association are not prepared to make any concessions.

After careful investigation and consideration it was felt that if the case was taken to the Board of Railway Commissioners it might result in a higher graduated table for values over $50.00. Furthermore, the present basis for express rates authorized by the Board has been predicted on the $50.00 valuation, and any attempt to secure a modification of this provision might have a tendency to disturb the present scale. However, in view of the fact that some sections of trade, such as the Packing Industry, are urging a modification of the present rule, the Transportation Committee will deal further with the matter as soon as actual figures can be obtained to show whether or not any saving would be effected by the proposed amendment.

Ruling Issued

Interstate Commerce Commission Allows Some Latitude in Time for Fyling Freight Claims

In an article published in the January issue of "INDUSTRIAL CANADA" under the caption of "Freight Claims and Their Collection," it was stated that suits for loss, damage or delay to shipments originating in the United States could be instituted *only* within two years and one day after delivery of the property, or in case of failure to make delivery then within two years and one day after reasonable time for delivery has elapsed.

The Interstate Commerce Commission have now issued their ruling in connection with the test case referred to, in which they say that the limitation in the bill of lading should not be construed as prohibiting the payment after two years and one day of meritorious claims if seasonably filed.

It is understood that the General Counsel of the United States Railroad Administration is preparing a circular withdrawing his instructions to the carriers of July 22nd, 1919, to withhold payment of claims of this nature pending the Commission's decision in the "Decker" case and now authorizing the railroads to pay just claims for loss or damage, even though the statutory period has expired. It is anticipated that these instructions will be issued shortly.

New Live Stock Contract

Board of Railway Commissioners Will Take Up Matter at Hearing This Month

A hearing will be held in Ottawa on Tuesday, February 10th, 1920, for the purpose of taking evidence on the proposed new Live Stock Contract and all other matters affecting transportation of live stock by rail in regard to which the Board of Railway Commissioners has jurisdiction. This question has been under consideration since 1904.

At a later date the Association and interested shippers took the initiative in urging a reasonable contract and had practically come to an agreement with the railways, on some points, when someone suggested to the Board that no action be taken until the matter was decided in the United States. However, there has been so much delay in arriving at a decision in the United States that urgent representations were made to the Chief Commissioner for an immediate decision in so far as Canada is concerned, and as a result the Board has now set the matter down for a hearing.

Increased Freight Rates

Considerable Increases Likely to be Asked for by the Railway Companies

Reporting to the Executive Council at its January meeting, the Transportation Committee made the following statement on the subject of increased freight rates:

"Judging from current events there is every indication that an application will be made for an increase in freight rates, prior to the return of the railways to private ownership in the United States on March 1st, 1920.

"As the operating ratio is now 95%, it is apparent that an increase of approximately 25% must be granted. In Canada, in so far as the Canadian National Railways are concerned, the operating ratio is considerably higher and, if that line is to be put on a proper footing, it may mean an increase of 50%. However, whatever happens in the United States will in all probability be reflected in Canada.

"The attention of your Committee was directed to an editorial which recently appeared in one of the leading newspapers of Canada, contending that the C.P.R. was not entitled to any additional revenue and suggesting that if it was found expedient to allow a further increase in rates the C.P.R. should be required to pay the amount of the said increase into the Dominion Treasury. The members agreed unanimously that no attempt should be made to interfere with the C.P.R., which would have the effect of curtailing the efficient freight service now provided by that Company, and accordingly the following motion was adopted: "That this Committee go on record as being in favor of the C.P.R. receiving the same rates and the same conditions as those allowed to the Government Railways in every shape and form."

"There is a widespread feeling in Canada that any increase in rates granted to railways should not apply on export

An Endorsement of Group Life Insurance

BY THE COMMITTEE ON

Industrial Betterment, Health and Safety

OF THE

National Association of Manufacturers

Authorization for the transaction of Group Life Insurance throughout the Dominion has been recently granted to Canadian and United States Insurance Companies by the Superintendent of Insurance for Canada.

The Equitable Life Assurance Society

of the United States

the pioneer company in the development of this modern welfare measure for employees, now offers its services to Canadian firms and corporations.

How successful this form of insurance has proven to all branches of business is shown in the report of the Committee on Industrial Betterment, Health and Safety of the National Association of Manufacturers which includes many endorsements from representative patrons. A copy of this pamphlet will be sent on request by the Equitable's Group Insurance Department. Here is a particularly pertinent paragraph:

> "Taking it as a whole, your Committee believes that to those having in mind the improvement of conditions of those in their employ, so far as the same may be justified by a modest expenditure, will probably find in Group Life Insurance the medium which dollar for dollar of such expenditure will prove most beneficial to employer and employe alike, and therefore to the general improvement of industrial conditions. As it has been aptly put by someone:
>
> "Could an addition of one to one and one-half per cent. of the payroll be more economically and satisfactorily expended in promotion of the security, loyalty and content of the workers than when invested in sound life insurance protection for employes?"

THE EQUITABLE

LIFE ASSURANCE SOCIETY OF THE UNITED STATES

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business. In this connection it has been pointed out that export rates to Canadian ports are usually kept on a parity with those applying via American ports. Canada must be kept in the position to permit exporters of this country to compete with the United States."

Railway Materials for Brazil

Large Quantities Required by the State-Owned Railroad System of the Republic

Information has been received through the Department of Trade and Commerce, that the State-owned railroad of Brazil, known as "A Estrada de Ferro de Carlos Barbosa a Alfredo Chanes," requires quantities of material of various kinds. Below is a statement of materials required. This has been forwarded by the Chief Engineer of the railway, and Canadian manufacturers who are interested should get in touch with Major G. B. Johnson, Canadian Government Trade Commissioner, Cairo (P.O. Box 2164), Rio De Janeiro, Brazil.

Railway Construction Machinery, Locomotives, etc.:
- Excavating machinery (steam or electric shovels).
- Rock drills (compressed air or electric).
- Picks, shovels, bars, etc.
- Rails and dump cars for removing earth and rock.
- Cableways and buckets for removing earth and rock.
- Explosives: Cement.
- Steel rails, weighing 28 to 40 kilos per meter, with all accessories.
- Bridge-steel girders for spans from 20 to 200 meters.
- Locomotives, passenger and freight, gauge 1 meter, minimum radius on curves 150 meters, heaviest climb 18 millimeters per meter, and track of rails weighing 30 kilos per meter.
- Freight cars, boxes and flats.
- Trucks, complete for one-meter gauge.
- Passenger coaches, one-meter gauge.
- Railway automobiles, one-meter gauge, for line service.
- Tools for track-laying and maintenance of way.
- Rail saws and drills.
- Turntables, switches.
- Telegraphic and telephonic equipment, including line material.

Machinery for Electric Power, no belt transmission:
- Machine tools for railroad shops, lathes, drills, planers, machine hammers, etc., for cutting and drilling iron and steel.

Compressed air installation for painting and riveting
Grindstones, ventilators
Woodworking machinery.
Furnaces for melting iron and other materials.
Cranes and winches for handling heavy pieces in the shops.
Hand tools, for stonemasons, blacksmiths, carpenters and electricians.
Clocks, time-keeping and night-watchmen's.
Pumps, compression and centrifugal (for electric or steam power).
Steam engines—stationary.
Gas engines (gasoline and kerosene).
Electric motors, dynamos and accumulators.
Surveying instruments, transits, levels, etc.
Drafting materials, drawing instruments, paper, inks, tables, etc.
Blue-printing equipment, complete.
Stone-crushing machinery.
Railroad scales (car and locomotive).

And all material for the construction, maintenance, and operation of a railroad.

Steamship Sailings

Proposed Sailings from West St. John, St. John, Halifax and Portland in the Near Future

West St. John to Liverpool.

*Canadian Voyageur..Can. Gov't Mer. Marine, Ltd..Ab't Feb. 10
Metagama .....C.P.O.S. Lines .....Ab't Feb. 12
*Sails from St. John.

West St. John to Antwerp.

War Beryl.....C.P.O.S. Furness Line (C.P.O.S.).Ab't Feb. 14
Scotian .....C.P.O.S. Furness Lines (C.P.O.S.)Ab't Feb. 16

West St. John to Avonmouth Dock (Bristol).

Sardinian.....C.P.O.S. Lines .....Ab't Feb. 28

West St. John to Manchester.

Manchester Corporation..Manchester Liners .....Ab't Feb. 10

West St. John to Havre (France).

Bilbster.....Can. Trans. Atlantic Line.....Ab't Feb. 8
Mississippi.....Can. Trans. Atlantic Line.....Ab't Feb. 18

West St. John to Bordeaux (France)

Wisley.....Can. Trans. Atlantic Line.....Ab't Feb. 24

West St. John to Australasian Ports—Melbourne, Sydney, Brisbane, Auckland, Wellington and Dunedin.

Durham.....New Zealand S.S. Company...Ab't Mar. 12

Halifax to Liverpool.

Canadian Seigneur...Can. Gov. Mer. Marine, Ltd..Ab't Feb. 28

Halifax and Glasgow.

Canadian Aviator....Can. Gov. Mer. Marine, Ltd..Ab't Feb. 17

Halifax to Barbados, Trinidad and Demerara.

Canadian Signaller...Can. Gov. Mer. Marine, Ltd..Ab't Feb. 19

Halifax to Santiago (Cuba) and Kingston (Jamaica).

Watuka .....Pickford & Black .....Ab't Feb. 10

Portland to Liverpool.

Dominion.....White Star-Dominion Line....Ab't Feb. 20
Canada.....White Star-Dominion Line....Ab't Feb. 28

Portland to London.

Willaston.....Cunard Line .....Ab't Feb. 15
Venusia.....Anchor-Donaldson Line .....Ab't Feb. 28

Portland to Glasgow.

Cabotia .....Anchor-Donaldson Line .....Ab't Feb. 18

Portland to Avonmouth.

Cornishman.....Dominion Line .....Ab't Feb. 23

Portland to Leith.

Cairngowan.....Thomson Line .....Ab't Feb. 15

West St. John to Manchester via Halifax.

Manchester Corporation.Manchester Liners .....Ab't Feb. 10

West St. John to Avonmouth.

Verentia.....Cunard Line .....Ab't Feb. 25

West St. John to Belfast.

Fanad Head.....Head Line .....Ab't Feb. 8

St. John to London.

Canadian Trooper...Can. Govt. Mer. Marine, Ltd....Ab't Feb. 28

St. John to Kingston (Jamaica) and Havana (Cuba).

Canadian Warrior...Can. Govt. Mer. Marine, Ltd....Ab't Feb. 11
Thos. J. Drummond..Can. Govt. Mer. Marine, Ltd....Ab't Feb. 25

St. John to Havana (Cuba).

Canadian Adventurer.Can. Govt. Mer. Marine, Ltd..Ab't Feb. 11
Canadian Sower.....Can. Govt. Mer. Marine, Ltd..Ab't Feb. 18

Halifax to Rio De Janeiro, Santos, Brazil and Buenos Aires, Argentine.

Canadian Pioneer..Can. Govt. Mer. Marine, Ltd....Ab't Feb. 20

Halifax to Havana, Cuba.

Canadian Trader....Can. Govt. Mer. Marine, Ltd....Ab't Feb. 14
Canadian Sailor....Can. Govt. Mer. Marine, Ltd....Ab't Feb. 21

B.C. Car Shortage

Serious Situation Developed in December, but was Relieved as Result of Negotiations

During the latter part of December a serious car shortage developed in British Columbia, which completely tied up the export of lumber from Canada to the United States. Immediately on being apprised of the situation a direct appeal was made to Sir Henry Drayton, Finance Minister, and to the Board of Railway Commissioners. This business amounted to approximately ten millions per month, but on account of the large number of Canadian cars in the United States the Canadian lines showed reluctance to allowing their equipment to be used for this traffic. The American Coast lines would not allow their cars to come into Canada for this lumber; but finally, as a result of negotiations, the C.P.R. agreed to provide sufficient equipment to handle the traffic.

Howard Smith Paper Mills

Company Issues Preferred Stock to Finance Purchase of Toronto Paper Manufacturing Company

A public offering of the unsold portions of $1,500,000 eight per cent. cumulative participating preferred stock of Howard Smith Paper Mills, Limited, has recently been made. Of the total $475,000 is to be exchanged for a like amount of preferred stock now outstanding, and the balance will be used to acquire the entire capital stock of the Toronto Paper Mfg. Co., Limited. The new stock is offered at 103, yielding over 7¾ per cent.



Head Office: MONTREAL

West Indian Trade

The Bank of Montreal having acquired an interest in the

Colonial Bank

an old-established English bank, now owned and controlled by

Barclay's Bank
LONDON

offers unexcelled facilities for the transaction of business with the West Indies, British Guiana, South America and Africa

Any Branch of the BANK OF MONTREAL or the Foreign Department at Montreal will be glad to answer all enquiries

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Provincial Paper Mills Co.
Limited

PAPER FOR CATALOGUES

Mills at
Thorold, Georgetown and Mille Roches, Ontario
HEAD OFFICE - TORONTO, CANADA

Cellboard is the proper name for what is commonly called corrugated board

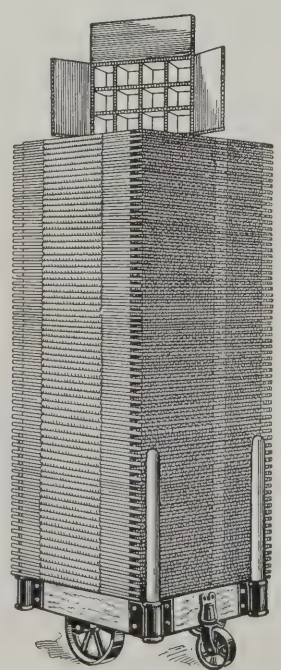
Established 1909

ADAMS CELLBOARD COMPANY

MANUFACTURERS OF FIRST QUALITY
SHIPPING CONTAINERS AND CORRUGATED PAPER

IMPORTERS OF
GUM SODA AND SEALING TAPES

Our board is the thickest on the market. Our capacity is a carload per day



OUR SPECIALTY
FOLDING CELLBOARD
FREIGHT BOXES

We desire to have your samples or measurements to quote on when you are considering placing an order

5 TO 21 DEFRIES STREET
AND DON ESPLANADE
TORONTO



Our New Address

WE take pleasure in announcing that our business has increased to such an extent that we are securing more adequate quarters.

After February 10th, 1920

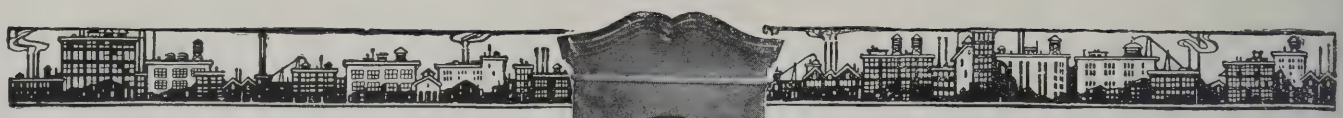
our Head Office will occupy the whole of the first floor in the Bank of Nova Scotia Chambers at the intersection of Queen, King, and River Streets, near Don Station, Toronto.

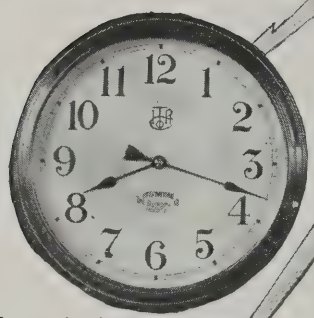
PHONES MAIN 102 and 104

John V. Gray Construction Co. Limited

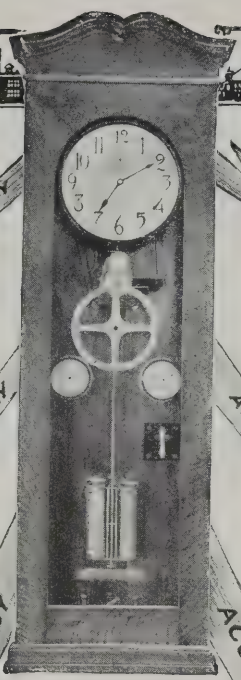
GENERAL CONTRACTORS

WINDSOR TORONTO

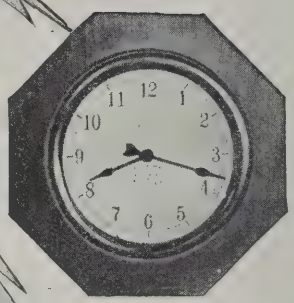




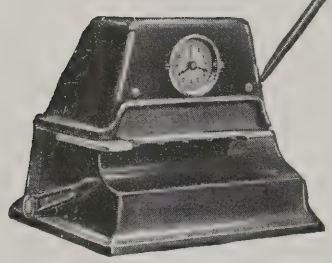
International
Secondary Clock



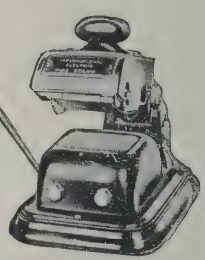
International
Self Winding
Master Clock



International
Secondary Clock



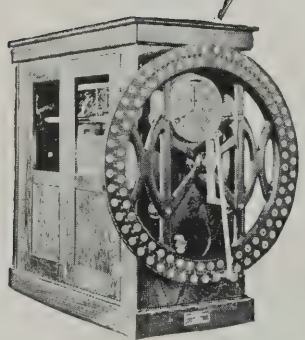
International
Cost Recorder



International
Electric Time Stamp

INTERNATIONAL ELECTRIC TIME SYSTEMS

Master Clocks - Secondary Clocks - Cost Recorders - Card Time Recorders - Dial Recorders - Time Stamps and Program Devices



International Dial Recorder.
Controlled by Master
Clock

For Businesses of all Kinds and all Sizes — Backed by Thirty-three Years' Successful Manufacturing of Time and Cost Computing Instruments

Write for Details



International Electric-Drive
Card Recorder. Controlled by
Master Clock

INTERNATIONAL BUSINESS MACHINES CO., LIMITED

TIME RECORDER DIVISION

FRANK E. MUTTON, Vice-President and General Manager

Head Office and Factory.
Campbell Ave., Toronto, Ont.

Also at Montreal
Winnipeg, Vancouver

(Also makers of Hollerith Electric Tabulators and Dayton Computing Scales)

- - - - that Time Recorder system you are thinking of buying

Is it "fully automatic"? To be so it must have the three features mentioned below. If it lacks any one of these it is NOT fully automatic

A Time Recorder System that is not "fully automatic" does not eliminate entirely the human element in its operation. Getting rid of this "human element" is a great economy and safeguard because then there is nothing for an employee to regulate or adjust. Nothing to remember---or forget. Any operation in a Time Recorder System that can be forgotten is a WEAKNESS and no system is stronger than its weakest link.

The 3 Automatic Features

found together only in Internationals are

1st.---The shifting of the Time Card (or Sheet) from day to day---is done automatically.

2nd.---The shifting of the Time Card (or Sheet) for the proper placing of the "In" and "Out" Records---is done automatically.

3rd.---The printing of all "Late" or "Early Leaving" recordings in Red or in a separate column --- is done automatically.

We make these fully automatic Recorders either self contained or electrically driven with control by a master clock.

Now the leaving out of any one of these three automatic features considerably reduces the cost and calls for a machine of a different build. We supply them of very high quality, and they will meet in price and surpass in merit, any other machine in the world.

On our Electric Recorders you can have either the "Late" records printed in a line below the regular record, or you can have it printed in Red. The latter is of course far superior and is selected by 95 per cent. of the Electric Recorder buyers.

Internationals give you COMPLETE service---or less if you want it. They are made in Canada and they stand apart for design, durability, finish and exclusive features.

Let us send you our descriptive matter

International Business Machines Co., Limited

ROYCE AND CAMPBELL AVENUES, TORONTO

FRANK E. MUTTON
Vice-Pres. and Gen. Man.

OFFICES IN ALL PRINCIPAL CITIES

(Also makers of Dayton Scales and Hollerith Electric Tabulators)

Control of Profiteering in Great Britain

(*Continued from page* 64)

cutlery, brushes, and domestic utensils of all kinds; pottery, wood-working and furnishing, building materials, and chemicals.

The duties of the Central Committee are exercised through three standing committees.

The Investigation of Prices Committee, which investigates costs, prices, and profit at all stages;

The Complaints Committee, which receives, hears, and determines complaints against wholesale traders;

And the Committee on Trusts, which obtains from all available sources information about trusts and trade combinations, having for their object the control of prices, output, or transport rates.

Among the members of the Central Committee are: Sir Thomas Allen, Parliamentary Committee, Co-operative Congress, and deputy chairman, Consumers' Council; Sir William Beveridge, director, London School of Economics; G. H. Stuart Bunning, president, Trades Union Congress, 1919; Viscount Burnham, publisher of the London *Daily Telegraph;* Baillie P. Gillespie, M.P., General Federation of Trade Unions; Stanley Machin, chairman, London Chamber of Commerce; J. J. Mallon, secretary, Anti-Swearing League; T. Robinson, M.P., National Confederation of Employers' Organizations; Sir Wilfred Stokes, Federation of British Industries; J. H. Thomas, M.P., president, the National Union of Railwaymen; Ben Turner, General Union of Textile Workers; and Sidney Webb.

There are six women on the committee.

One feels that so far the Profiteering Act in Great Britain has been a good deal of a squib—a false alarm. The public, which cried out loudly and bitterly against alleged or suspected profiteering, has not been at all enthusiastic in hauling alleged profiteers to trial. Also, what is profiteering? Where does profiteering begin?

The Profiteering Act has a life of six months. In the months that remain there is not likely to be any more zeal on the part of the public to take advantage of the provisions of the Act than it has shown in the weeks that have elapsed since August 19. That there has been profiteering none is likely to deny, but in the main the present high prices for most things in common use are not high because of profiteering, but of other causes.

File Manufacturers Had Good Year

By E. M. THURBER

Manager Nicholson File Company, Port Hope

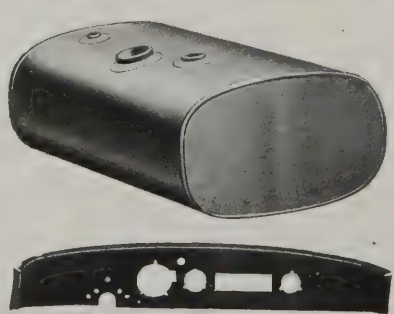
In 1917 we made large additions to our plant, but on account of labor shortage did not get any benefit from this added equipment until the end of 1918. During the year 1919 we were able to get all the men we required, many of them old hands who had returned from France. The efficiency of our force steadily improved, our output increased, and the percentage of spoilt work decreased and our output was the largest we ever had.

During the first half of last year new business was small, we were operating our plant largely on old orders and getting our stock in shape. During the last half of the year business has been much better than we anticipated and we have had no difficulty in disposing of our entire output. Prices have remained constant during the year.

We have had no trouble getting the raw material we required, and while transportation has been slow, it has not inconvenienced us. This is largely a question of anticipating requirements and keeping a surplus stock of material on hand. The outlook for the Spring appears good, but conditions are too uncertain to make any predictions.

STEEL STAMPINGS





NEARLY 60 years of specialized experience and a plant that has few equals on the continent for equipment, assure you exceptionally good service when you place your order with us for Steel Stampings and deep-drawn work. We can handle Stampings of every size and are particularly well-known for automobile body stampings and tank work of all descriptions.

Are you using castings or forgings when perhaps a stamping would not only be more economical but would serve better ?

Our engineering department is at your service to help you determine where you can replace forgings or castings with steel stampings.

We Invite Your Enquiry

THE PEDLAR PEOPLE LIMITED

(Established 1861)

Executive Offices and Factories : OSHAWA, ONT.

Branches : Montreal, Quebec, Ottawa, Toronto, Winnipeg, Vancouver





Dominion Copper Products Company, Limited

Manufacturers of

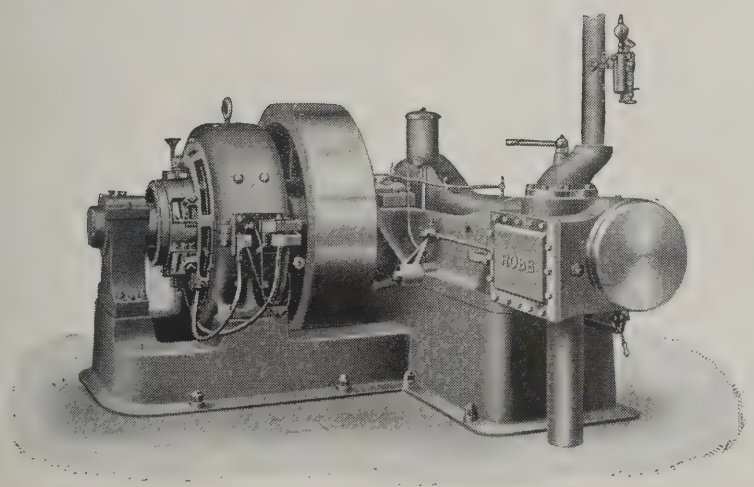
COPPER AND BRASS

Seamless Tubes, Sheets and Strips in all Commercial Sizes

Office and Works: LACHINE, Que., Canada

P.O. Address: MONTREAL, Que. Cable Address: "Domcopper"

ROBB POWER PLANTS



Engines

Corliss, slide valve, vertical, horizontal, simple and compound.

Boilers

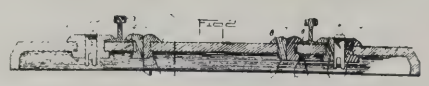
Water tube, return tubular, improved Scotch marine and portable.

Robb Engineering Works, Limited, Amherst, N.S.

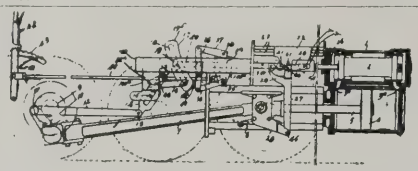
MONTREAL OFFICE
Phone Westmount 6800

TORONTO OFFICE
20 Victoria Street

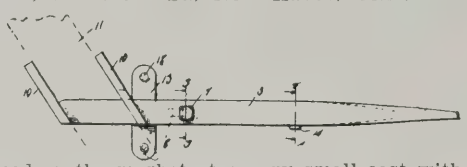
PATENTS FOR SALE



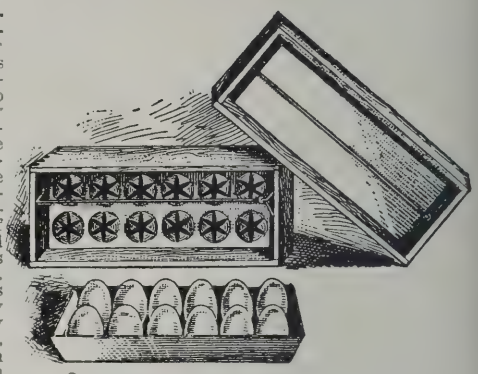
METALLIC RAILROAD TIE, the only absolutely satisfactory device of this nature, being provided with an improved means for rigidly connecting the rails to the tie, nothing to work loose, strong, durable, a real labour saver. The inventor, C. R. Ruggaber, Box 231, Augusta Road, Savannah, Ga., offers patent rights in the Dominion for sale.



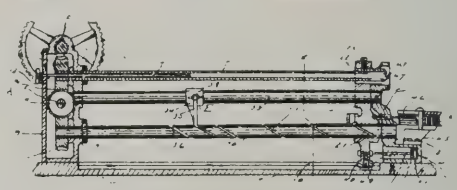
VALVE MOTION FOR FLUID PRESSURE ENGINES.—The object of this invention is to control the valve movement so as to allot a greatly increased portion of the cycle of movement to each open position of the valve and to cause a correspondingly smaller portion of the cycle of movement to be occupied by the opening and closing movement, with a corresponding gain in the time allowed in the expansion and lessening of the compression time in the exhaust end of the cylinder, and to provide means for a constant angle of advance with respect to the main crank of the driving axle. Patent rights for sale by W. S. Clarkson, 90 Foster St., New Haven, Conn.



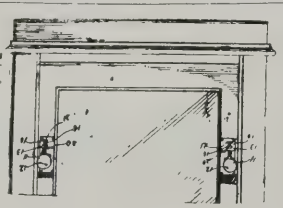
DOOR AND SASH VISE.—A very simple and inexpensive device, thoroughly efficient in use, and one which may be manufactured and placed on the market at a very small cost with reasonable profit. The device is one which has been thoroughly tested and is beyond all question of experiment. Patent rights for sale by C. F. Shilling, P.O. Box 306, Avoca, Ia.



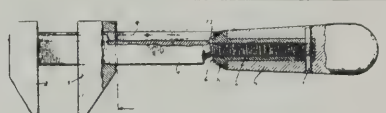
EGG SHIPPING CONTAINER for carrying eggs in such a manner as to thoroughly pack and protect same against breakage, and at the same time permit the transporting of same by parcel post, express and the like. The device is one which may be cheaply manufactured, is simple in construction and absolutely efficient in use. Patented April 11, 1916. U. S. No. 71296 Patent rights for sale by F. Koht, 1903 Cottage Grove Ave., Des Moines, Ia.



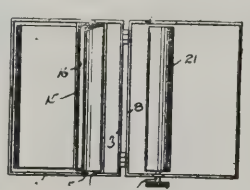
FENCE-STAY-WIRE-FORMING MACHINE whereby a fence stay may be formed from a single piece of spring or other wire in a simple and rapid manner. The finished article is of an even, neat appearance, as well as being strong and durable. For further particulars apply to the inventor, J. F. Tillman, 1419½-4th Ave., Seattle, Wash., who offers patent rights for sale.



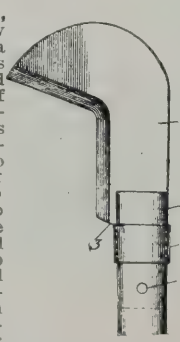
WINDOW LOCK, specially adapted for use in connection with the sash of weightless windows, greatly improving the construction of devices of this character and which can be readily thrown into or out of operation as desired. This device may be cheaply manufactured and is one which, in view of its simplicity and reliability, should find a very ready market. Patent rights for sale by P. Zielinski, Armstrong Creek, Wis.



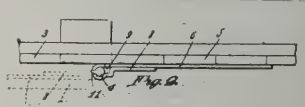
MONKEY WRENCH, an improved construction having a shank and jaw member fixed on one of the shank ends and a movable jaw slidingly disposed on the shank, and a jamming member extending over the length of the shank and being embedded therein, and a means at the handle of the wrench for lifting the rear end of the jamming member to lock the movable jaw on the shank at the desired place. The device is without doubt a great improvement over any of the present devices now on the market, and in view of its simplicity and the cheapness with which it may be manufactured, should prove an interesting proposition. Patent rights for sale by Al. L. Stebor, Jr., 914 George St., Plainfield, N.J.



CIGARETTE ROLLER, a simple and ingenious device having a paper and tobacco magazine, a hollow roller for receiving the tobacco from the magazine, a paper guide partially surrounding the hollow roller, and a cut-off for the flow of tobacco, and a pivoted platform supporting the paper for leading fresh papers to the paper guide. This device is one of the most efficient of its kind that has ever been brought to the attention of the public. Patent rights for sale by R. S. Jenkins, P. O. Box 651, Fort Myers, Fla.



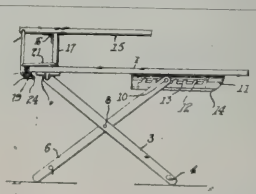
BUSH KNIFE, this device is now being used by a great many farmers and others engaged in the clearing of land and wherever the knife is known, the workmen will use no other. Its cutting qualities are so much superior to any other that the inventor has found it impossible to supply the demand and is therefore desirous of getting in touch with a reliable manufacturer with a view of disposing of his interests or arranging for the manufacture of his device in the Dominion. For further particulars apply to Q. Sawyer, Creswell, N.C., who offers patent rights for sale.



GATE HINGE, a strong, durable device, simple in construction, and efficient in use, easily applied and having few parts, so that it may be cheaply manufactured and placed on the market at a price that will compete with any of the present devices of this character. Patent rights for sale by E. C. Crook, Lewistown, Mont.



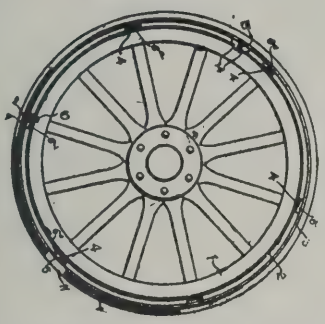
STOVE PIPE, having for its object to permit a length of stovepipe being easily cleaned without taking it down or putting out the fire in the stove. Also, by inserting one in the chimney flue, the same can be easily cleaned at any time without removing the pipe. The device is one which may be cheaply manufactured and placed on the market at a small cost with reasonable profit. Patent rights for sale by E. P. Pearson, Maple Brae Farm, Carp, Ont.



IRONING BOARD that not only fills all requirements, but actually helps make ironing easy. There are no legs to interfere with the ironing of skirts or any other articles. The device may be adapted without necessity of unfastening any thumb-screws or bolts. When folded it takes up smaller space than any other folding ironing board. Patent rights for sale by M. P. Nichols, Leetonia, Ohio.

HAROLD C. SHIPMAN & CO., Patent Attorneys, Ottawa, Canada

PATENTS FOR SALE



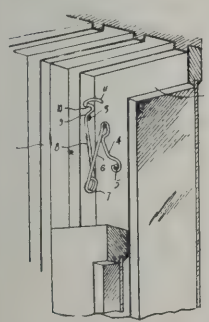
AUTOMOBILE WHEEL RIMS, comprising certain new and useful improvements in automobile wheel rims of the demountable type, and has for its object an improved construction possessing the desirable characteristics of rigidity and strength, which will require no bolts, no crosscut in the rim to admit water into the tire casing or shoe and which can be very easily manufactured and will not be liable to get out of order or become loose in service. The device aims to generally improve devices of this class so as to render them more useful and commercially desirable. Canadian and U. S. patent rights for sale by W. Martin, 12,407 St. Clair Ave., Cleveland, Ohio.



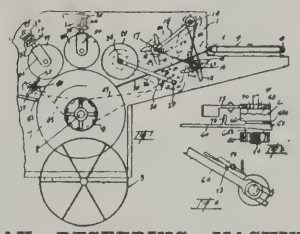
RESILIENT TIRE for use on vehicle wheels, and embodies springs in contradistinction to tires of the pneumatic type in order to give resiliency to the structure, the principal object being to provide a resilient tire which may be inexpensively manufactured and at the same time prove durable and easily maintained in good repair. For further particulars apply to R. F. Burnett, R.R. No. 3, Coffeyville, Kans., who offers patent rights for sale.

WINDSHIELD MATCH-SAFE, a newly patented device by means of which a pipe, cigar or cigarette can be easily and surely lighted by a common match in the highest wind. Neat, novel, simple and inexpensive, and needed by every smoker. Should prove to be a great seller. Patent rights for sale by E. P. Hovey, East Quogue, N.Y.

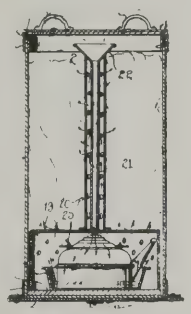




STORM WINDOW HOLDER, particularly adapted for securing a frame window in place or which may be used equally as well for supporting screen frames or the like. The fastener is attached to the inside of the frame and is protected from the elements so that the possibilities of water entering the screw holes by which the fastener is attached and rotting of the material is limited. Patent rights for sale by E. P. Ekman, Wausa, Nebraska.



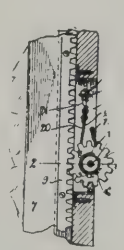
FLAX DESEEDING MACHINE, a thoroughly efficient and economical machine, specially provided with means for automatically feeding or retarding the feeding operation as desired. No wasted seed. Simple in construction, strong, durable, easily operated, and may be manufactured and placed on the market at a price that will compete with any of the present devices. Patent rights for sale by H. L. Larson, Headquarters Northern Con. Co., P.G.E.R.R., Cariboo, B.C.



DISINFECTOR AND DEODORIZER, particularly adapted to disinfect and fumigate articles such as clothes, by the use of formaldehyde or other like disinfecting materials. The device is very simple in construction, may be cheaply manufactured, and is of inestimable value to doctors for emergency operations where it is necessary that uniforms or clothes must be thoroughly disinfected on short notice. For further particulars apply to E. J. Capek, Schuyler, Nebr., who offers patent rights for sale.



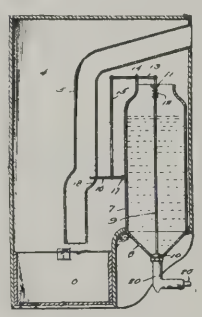
CHOCK BLOCK to be used in connection with a waggon bolster. The device consists of a channel iron disposed in the ordinary bolster, a chain means for fastening the channel iron and chain to the bolster, a block disposed in the channel, and further provided with a slot below the opening and communicating therewith, said chain being insertable in the opening and locked in the slot for holding the block in a set position. This device is one which, in view of its convenience and simplicity, should prove an interesting proposition. Patent rights for sale by G. Abrey, Osceola, Ark.



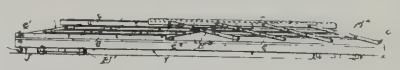
WINDOW ATTACHMENT for use in connection with windows for obviating the necessity for the now generally used window cords and weights and generally simplifying and improving the construction of devices of this nature. It may readily be applied to the window frame or removed therefrom and is of extremely simple and inexpensive construction, embodying but few separable parts, all of which may be manufactured at a low cost. Patent rights for sale by J. Stavnizky, 90 Wells St., South Manchester, Conn.

IMITATION GRASSHOPPER, is so natural that it is hard to distinguish between the real thing and this new imitation. It has been proven that they will catch bass and shy big trout when other lures fail. The device consists in forming a body portion of buoyant material, the legs being made from shafts of feather by cutting the barbs from the shafts and bending the shafts to form triangular members having overlapping ends. Then the shafts are fastened in place on the body in a manner to represent the legs of a grasshopper, and by fastening the feathers upon the back of the body member you have the grasshopper complete in detail. There is nothing in the whole makeup that will rot out of season. The whole construction is strong and durable and when carefully handled will outlast any other fly. Patent rights for sale by M. M. Palmer, 119 West Washington St., Pasadena, Cal.



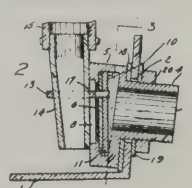


VENDING MACHINE, a simple and ingenious device for the dispensing of beverages so constructed that by placing a coin in the chute provided the device will automatically measure out a certain proportion of the beverage to be dispensed. The device is very simple in construction, attractive in design, and should prove an interesting proposition in view of the very extensive and uncompeted market. Patent rights for sale by E. P. Mitchell, Tappen, N.D.



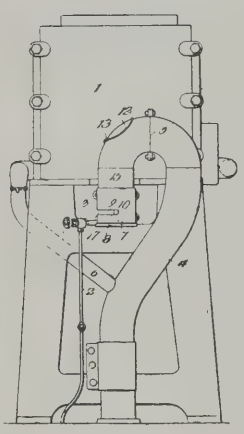
RAILWAY FREIGHT CAR for expeditious handling of freight of railroads and steamships. With this device railroads would know no such thing as freight congestion and steamships, of course, would not be delayed by stalled railroad shipments. The device will effect the complete release of freight cars from every siding and terminal and will effect enormous economies in railroad fuel and car equipment, and prevent breakage of merchandise in transit. Absolutely no delays. For further particulars apply to H. Epstein, 277 Broadway, New York, N.Y.

WASH TUB of special construction, having a perforation in the side wall of the tub and a nozzle adjustably attached so as to facilitate the emptying or filling of the tub with water as desired. The device is so constructed that it may be manufactured separately or used in connection with a tub washing machine. Patent rights for sale by Mrs. Alina Lukus, 13 Lerox St., Flagstaff, Ariz.

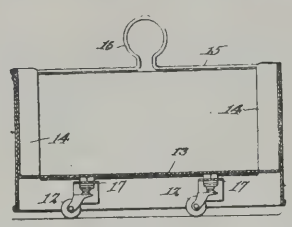


HAROLD C. SHIPMAN & CO., Patent Attorneys, Ottawa, Canada

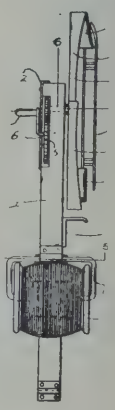
PATENTS FOR SALE



BLAST PIPE CONNECTION, to be used in connection with a furnace having an air conduit and a goose neck section immediately adjacent to the furnace and leading into the combustion chamber of the furnace and an automatic damper hinged within the apex of said goose neck section, and adapted to be automatically secured in its raised position. This device is partly adapted to be used in connection with an oil-burning furnace and has been thoroughly tested. Patent rights for sale by A. J. Borener, 1143 E. 81st St., Chicago, Ill.



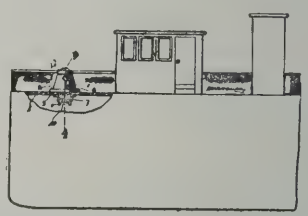
CUSPIDOR HOLDER AND LIFTER, the device is absolutely sanitary and provides a simple, inexpensive, and efficient means for holding and lifting cuspidors, for the movement of same from one place to another without lifting, and is adapted to prevent accidental overturning of the cuspidor Patent rights for sale by W. G. Devlin, Arcata, Cal.



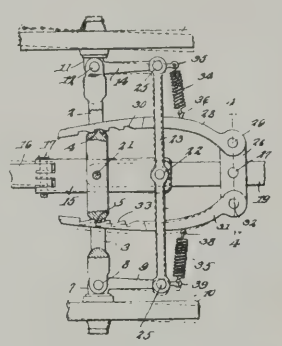
SHUTTLE WINDER for winding thread upon tatting shutters, is compact in structure and has a shuttle holder rotatably supported by a suitable supporting structure. The shuttle holder is constructed of a pair of telescoping sections so that it may be adjusted for holding any size of tatting shuttle. The device is simple in construction and has been thoroughly tested and found to be absolutely efficient in use. Patent rights for sale by W. Hendry, 1011½ A St., Tacoma, Wash.



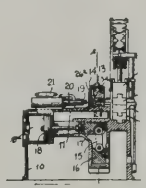
HASP LOCK, a strong durable and efficient device, which may be cheaply manufactured and placed on the market and that will compete with any of the present devices. The device is one which has been thoroughly tested and which has been found to be superior in construction and more efficient in use than any article of this nature that has yet been brought to the attention of the public. Patent rights for sale by H. E. Miller, Moro, Ark., U.S.A.



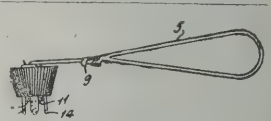
APPARATUS FOR RAISING SUBMERGED VESSELS which may be permanently secured to the vessel, and which, when the vessel is sunk, will indicate the location of same and form a guide for the lifting mechanism, so that the latter may be carried directly to the ship when let down into the water, and secured to same to facilitate the raising thereof. Patent rights for sale by W. A. Blakesley, 3403-30th Ave., S.W., Seattle, Wash.



WAGON TONGUE having special means for mounting same in such a way that the tongue will not swing laterally and strike the animals when one wheel of the vehicle drops into a hole or other depression in the highway. The device has been thoroughly tested and has been proven to be absolutely efficient in use. For further particulars, apply to J. Hendrickson, P.O. Box 461, Mullan, Idaho, who offers patent rights for sale.



DRILL FORMING DIE for forging and sharpening rock drills or other drill bits, and particularly adapted to be used in connection with machines which have vertical operating clamping dies and horizontally operating upsetting hammer. The device is one which has been thoroughly tested and is beyond any question of experiment. For further particulars apply to O. C. Julien, Montreal, Wis., who offers patent rights for sale.



PIE CRIMPER designed to readily press together the edges of the pie crust and simultaneously trim the edge of the pastry protruding over the edge of the pan. The device is of simple and durable construction and may be manufactured and sold at a comparatively low cost with a very reasonable profit. Patent rights for sale by J. H. Brewer, Silverton, Ore.

Manufacturers interested in patents should have their names on our Service Dept. mailing list

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All this material is in perfect condition and will be sold to the highest bidder. Offers invited for the whole or part. F.O.B. West Toronto. For further particulars, apply to

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PATENT FOR SALE

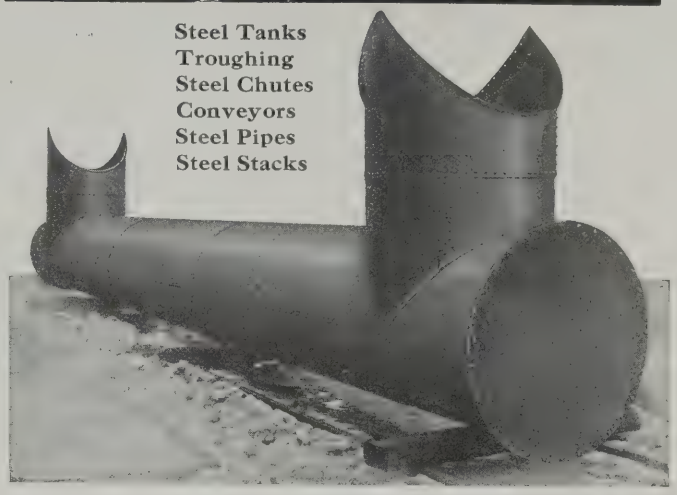
Patent for sale on Lamp Chimney Holder. Simple and inexpensive to manufacture. Will sell outright for cash or sell right to manufacture in Canada. Stays on burner when chimney is pulled off, but may be removed or put on any time. Miss Amanda Halverson, Delavan, Minn.

Closer Relations With B. West Indies

(*Continued from page 57.*)

build up the Empire, until that portion of the Empire down there would be something that we should be proud of. We should have in North America a bulwark of the Empire of a size and of an importance such as at present we little dream of.

Now, I make certain suggestions; I have very definite views myself as to what is best. Another man makes other suggestions, and a third person makes other suggestions, and you do not know what to do, and no government knows what to do. And if I were in the Government, I would not know what to do, but I would know that the only way to decide a thing like this is, not to take what I say, or what any other fellow says, but to begin by getting a commission appointed, with British Guiana alone, preferably, to discuss their special problems. There will be no trouble at all in getting the 50 per cent. arrangement. British Guiana is ready to consider the appointment of a commission to discuss the question. Let us make some move. What we want is to have a commission representing British Guiana and representing Canada, and the Mother Country also would have a representative on it, and let them take everything into account and let them thresh out all these different matters and decide how far we can go in the direction of relationship, commercial or political; let them consider everything and make a definite recommendation of what is necessary to consolidate, commercially at least, Canada and the West Indies. If Canada does that, our Government will have done one of the most important things ever done by a Canadian Government, and I hope something will be done soon.



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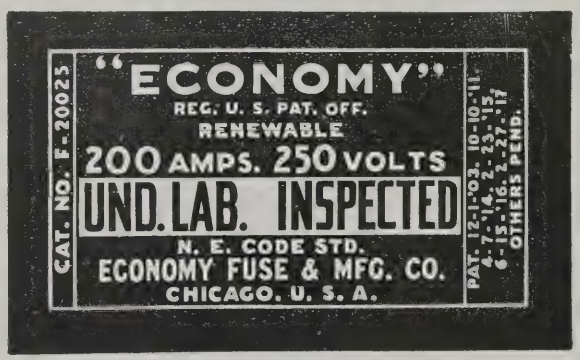
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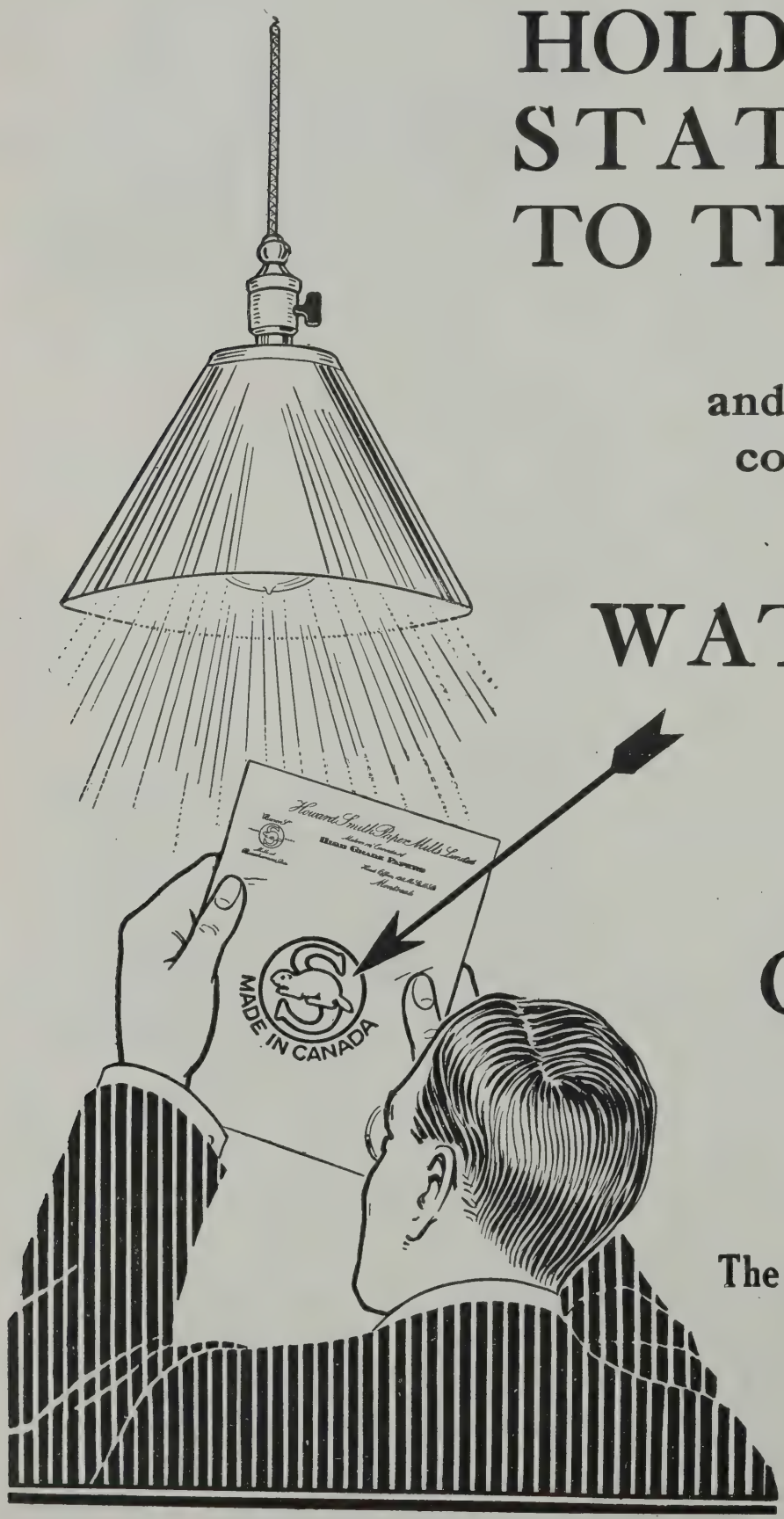
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OFFICE AND FINANCE

Why Appraisals of Plant are Necessary

The Four Prime Uses of an Appraisal and Some of the Factors which Enter into the Determination of Present-Day Value

By CHARLES W. McKAIY

(Reprinted from "Factory")

THE four prime uses of the industrial appraisal of to-day are:

1. For determining annual depreciation for purposes of Federal income tax.
2. For determining insurable values.
3. For use in cost accounting.
4. For financial purposes.

A brief résumé of these four prime uses of the engineering appraisal will be presented in this article and a more detailed consideration will be accorded them in the ensuing articles in this series. It is not the purpose of these articles to attempt to train the reader as an appraisal expert, but rather to present the fundamentals of these all-important questions of value and depreciation in such a manner as to facilitate the busy executive in the future administration of his business.

Depreciation for Tax Purposes

The use of an appraisal in connection with the determination of annual depreciation for tax purposes presents many intricate and involved problems. To paraphrase the voluminous literature issued by the Inland Revenue Branch of the Treasury Department, it may be said that the basis for determining annual depreciation is "cost." Cost, as defined by the Revenue Department, consists of cost as of March 1, 1913, for all buildings, machinery, equipment, and so on installed, or acquired, prior to that date, and actual original cost as shown by the company's books and records for all property acquired subsequent to March 1, 1913.

After determining cost in the manner above outlined, it is next necessary to determine average lives applicable to the various component elements of an industrial company's buildings, machinery, and equipment. The average life of any item of plant is dependent upon the following four factors:

1. Depreciation resulting from wear and tear.
2. Depreciation resulting from age.
3. Depreciation due to inadequacy.
4. Depreciation due to obsolescence.

All of these factors must be given the most careful consideration in determining the average life of industrial equipment.

Knowing the average life and the scrap or salvage value, it is a comparatively simple task to determine an annual rate of depreciation which, when applied to the item of plant under consideration, will give the corresponding depreciation in dollars per annum.

The Federal Government has placed the burden of the proof, as to costs and as to annual depreciation, squarely upon the taxee or, more properly speaking, squarely upon the appraisal engineer whom the taxee appoints to represent him in solving his depreciation problems.

The truth of the foregoing statement will be obvious from the following quotations, each taken from a recent letter to the writer from the Inland Revenue Branch of the Treasury Department:

"A reasonable allowance for the wear and tear of property arising out of its use or employment in the business or trade is to be based on the cost of such property—or on its fair market price or value as of March 1, 1913, if acquired prior thereto. In the absence of proof to the contrary, it will be assumed that such value as of March 1, 1913 is the cost of the property less depreciation up to that date.

"Replying to your inquiry as to the proper rates to be used in computing depreciation on various classes of machinery, you are informed that no rates are prescribed by this office. The rate must be determined by the estimated number of years constituting the probable life of property with respect to which depreciation is claimed.

"You are advised that this office has established no specific method of determining the capital sum to be replaced by depreciation allowances, but considers such sum a question of fact to be established by any evidence which the tax-payer chooses to submit in support of the figure placed upon it by him."

It will be obvious that the determination of "cost," for tax purposes, is by no means a simple problem. The inventory must be so taken as to segregate all buildings, machinery, and equipment installed, or acquired, prior to March 1, 1913, from buildings, machinery, and equipment acquired subsequent to that date. The inventory of plant acquired between March 1, 1913 and the date of appraisement must again be subdivided to show the actual dates of acquisition of the component elements.

In determining average life—and therefore annual depreciation rates—the whole inventory (both the inventory of plant acquired prior to March 1, 1913 and the inventory of plant acquired subsequent to that date) must again be subdivided, or classified, according to the average lives, or depreciation rates, of the component element. In other words we cannot apply the depreciation rate applicable to property found to have an average life of 20 years to property having an average life of 10 years.

Proof Must be Conclusive

Again, in view of the fact that the Federal Government has so obviously placed the burden of the proof—in this matter of depreciation—upon the taxee, it is most important that such proof shall be conclusive—founded upon recognized principles of depreciation, modified to meet the peculiar requirements of the case in hand.

This term, "peculiar requirements," has been used advisedly. The obsolescent factor of depreciation, for instance, is a variable one. Certain conditions may exist, and can be proved to exist, in one plant for a given type of machine which do not exist in another plant for the same type of machines. The same argument applies to building and miscellaneous equipment.

The writer recalls a case where a building which, under ordinary conditions, would have had a relatively long life,

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Established over 100 Years

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Rest - - - $20,000,000
Undivided Profits, $1,812,854
Total Assets - $545,304,809

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bid fair to have an exceedingly short life—due to two of the four depreciation factors already referred to. In the first place the vibration of the peculiar type of machinery used in the case in question tended materially to shorten the life of the building. This shortening of life was obviously due to the "wear and tear" factor of depreciation.

Again, rapid changes in the manufacturing art were so modifying the machine requirements that it seemed probable that the building in question would have to be entirely rebuilt at an early date to provide for the installation of the new machinery necessary to keep pace with the change in the manufacturing requirements. Hence, the building was depreciating rapidly, not only from wear and tear, but also from obsolescence.

Unless every depreciation problem of this nature is solved upon its individual merits by technically trained appraisal specialists, the conclusions reached are likely to prove faulty, and the proof—as to depreciation—submitted by the taxee, may not withstand the searching scrutiny to which it is bound to be subjected by the Federal Tax authorities. The Federal Government, in placing the burden of the proof upon you, the taxee, expects—and has a right to expect—a complete, concise and authoritative solution of your problem.

This whole question of the relation of depreciation to industrial appraisement and to the Federal income tax will be treated in detail in subsequent articles in this series.

The Insurance Appraisal

The insurance appraisal requires entirely different treatment from one made for purposes of determining annual depreciation. Insurable values are determined upon the basis of reproduction, or replacement costs. Reproduction costs, to be complete, must include not only the cost of machinery and equipment f.o.b. point of purchase but also the freight and installation charges on the equipment purchased.

From the reproduction cost there must be deducted accrued depreciation—in other words the present sound insurable values as of the date of appraisement must be determined.

In making an insurance appraisal, proper summaries must be provided to show the insurable values according to the insurance company's subdivision of the property.

The advantage of an unbiased appraisal, made by a neutral outsider, can hardly be exaggerated. The subject of insurance appraisals, and practical suggestions as to their preparation, will be discussed in a subsequent article.

The Appraisals in Cost Accounting

Competition in modern industry—and the constantly increasing cost of material and labor—has made the subject of cost accounting a most important one.

It is frequently advisable to allocate manufacturing costs to the various operating departments. In so doing, it is necessary to know not only the actual material and labor costs but also the overhead costs or "departmental burden."

In determining the investment by departments and in allocating the overhead charges for insurance, interest, taxes and depreciation, the engineering appraisal plays a very important part.

Having determined the total investment and the investment in each department it is a comparatively simple problem to allocate properly all of the overhead costs.

There is still another, and a most important use of the modern engineering industrial appraisal. Industrial companies frequently require capital for plant extensions and business promotion. The investment bankers who make a specialty of financing industrial property require a complete appraisement of both the tangible and intangible assets of the company under consideration.

This phase of the subject of industrial appraisement is

most important to the industrial executive, and will be treated in detail in the last article in this series.

Besides the four main uses outlined here, other more specialized uses arise from time to time in a particular plant. The appraisement for these specialized uses is handled as the individual case demands.

The importance of so designing an industrial valuation as to meet all the demands that may be placed upon it, can hardly be exaggerated. It is possible to design an appraisal to meet every valuation requirement of the industrial executive. The scope and manner of preparation of such an appraisal will be discussed in subsequent articles, together with a comprehensive, but concise, treatment of the subject of depreciation.

Dominion Bank

Strong Position of This Institution Disclosed by Annual Statement for 1919

A perusal of the statement submitted to the shareholders of the Dominion Bank at the annual meeting on Wednesday, January 28th, very clearly indicates that this well-known institution had a most satisfactory year ending December 31st, 1919.

The net profits amounted to the substantial sum of $1,169,000, an increase of $83,000 compared with 1918. As a result the bank paid to its shareholders a bonus of 1 per cent., in addition to the regular dividends at the rate of 12 per cent. per annum. In all $780,000 was distributed in dividends and bonus. The net profits amounted to 9 per cent. of the bank's capital and reserve.

As to the improvement which took place during the year in the bank's financial position, the total assets on December 31st last, stood at $143,500,000, an increase for the twelve months of $10,000,000. But that which will particularly interest those who are disposed to closely analyze financial statements is the fact that the bank's immediately available assets are equal to 54 per cent. of its liabilities to the public. The item standing under this heading is $70,075,000, being an increase of $6,546,000 over 1918. Cash assets alone amount to 24.59 per cent. of the public liabilities, the total cash assets, $31,903,000, being in excess of the previous year by $3,405,000.

It is quite evident that the management of the Dominion Bank has continued during the year its conservative policy in respect to the valuation of its assets and the augmenting of the bank's general strength. Off its bank premises account it has written the sum of $300,000, or $50,000 more than it did in 1918, while its note circulation has been reduced by $332,000. The balance carried forward to profit and loss account, amounting to $495,700, is in excess of the previous year by about $50,000.

That there has been an expansion in the Bank's relationship with the business interests of the country is evident from the increase of $2,328,000 which took place in commercial loans, the total at the end of the year standing at $66,400,000.

Laurentide Company

Reorganization has been Approved by the Shareholders of the Company

At a special meeting of shareholders of the Laurentide Co. on January 27, approval was unanimously given to reorganization proposals submitted by the board. Assets and liabilities will be transferred to a new company of the same name,

EXPORT TRADE

Manufacturers contemplating the extension of trade in foreign countries are offered the assistance which this Bank's world-wide business connection makes possible.

The experience and facilities of a department of the Bank devoted wholly to foreign business are at your command.

THE CANADIAN BANK OF COMMERCE

PAID-UP CAPITAL - - - $15,000,000
RESERVE FUND - - - $15,000,000

85A

The Merchants Bank of Canada

Head Office, MONTREAL Established 1864

Paid-up Capital	$ 7,000,000
Reserve Funds	7,574,043
Total Deposits (Nov. 30, 1919)	167,000,000
Total Assets (Nov. 30, 1919)	200,000,000

President: Sir H. Montagu Allan, C.V.O
Vice-President: K. W. Blackwell
General Manager: D. C. Macarow
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365 Branches in Canada Extending from the Atlantic to the Pacific, of which 138 are in Ontario, 44 in Quebec and 180 in Western Canada

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THE DOMINION BANK

At the Forty-Ninth Annual General Meeting of the Shareholders of the Dominion Bank, held at the Head Office, in Toronto, on 28th January, 1920, the following statement of the affairs of the Bank as on the 31st December, 1919, was submitted:

Balance of Profit and Loss Account, 31st December, 1918..		$446,503 22
Profits for the year, after deducting charges of management and making full provision for bad and doubtful debts..	$1,256,053 83	
Less		
Dominion Government War Tax (on circulation) $60,000 00		
Taxes paid to Provincial Governments 26,350 00		
	86,350 00	
Making net profits of		1,169,703 83
		$1,616,207 05
Which amount has been disposed of as follows:		
Dividends (quarterly) at Twelve per cent. per annum $720,000 00		
Bonus one per cent. 60,000 00		
Total distribution to Shareholders of Thirteen per cent. for the year	$780,000 00	
Contribution to Officers' Pension Fund	30,000 00	
Contributions to Patriotic and other Funds	10,500 00	
	$820,500 00	
Written off Bank Premises.....	300,000 00	
	$1,120,500 00	
Balance of Profit and Loss Account carried forward	495,707 05	
		$1,616,207 05

GENERAL STATEMENT

LIABILITIES

Capital Stock paid in		$6,000,000 00
Reserve Fund	$7,000,000 00	
Balance of Profit and Loss Account carried forward	495,707 05	
Dividend No. 149, payable 2nd January, 1920	180,000 00	
Bonus, one per cent., payable 2nd January, 1920	60,000 00	
Former Dividends unclaimed ...	4,089 00	
		7,739,796 05
Total Liabilities to the Shareholders		$13,739,796 05
Notes in Circulation		$9,525,809 00
Due to Dominion Government ..		5,000,000 00
Deposits not bearing interest..	$37,088,399 96	
Deposits bearing interest, including interest accrued to date	74,325,657 59	
		111,414,057 55
Balances due to other Banks in Canada		878,911 22
Balances due to Banks and Banking Correspondents elsewhere than in Canada		973,956 16
Bills Payable		197,532 96
Acceptances under Letters of Credit		1,168,405 41
Liabilities not included in the foregoing		606,451 47
Total Public Liabilities		129,765,123 77
		$143,504,919 82

ASSETS

Gold and Silver Coin	$1,980,842 69	
Dominion Government Notes ...	15,843,726 00	
Deposits with Central Gold Reserves	4,100,000 00	
Notes of other Banks	1,170,382 54	
Cheques on other Banks	6,816,287 08	
Balances due by other Banks in Canada	3,857 96	
Balances due by Banks and Banking Correspondents elsewhere than in Canada	1,988,043 33	
	$31,903,139 60	
Dominion and Provincial Government Securities, not exceeding market value	8,790,080 39	
Canadian Municipal Securities, and British, Foreign and Colonial Public Securities other than Canadian, not exceeding market value	13,334,525 62	
Railway and other Bonds, Debentures and Stocks, not exceeding market value	1,996,115 44	
Call and Short (not exceeding thirty days) Loans in Canada on Bonds, Debentures and Stocks	9,352,534 25	
Call and Short (not exceeding thirty days) Loans elsewhere than in Canada.....	4,698,984 25	
		$70,075,379 55

THE DOMINION BANK—*Continued*

ther Current Loans and Discounts in Canada (less rebate of interest)	65,396,248 68	
ther Current Loans and Discounts elsewhere than in Canada (less rebate of interest)	1,050,488 62	
iabilities of Customers under Letters of Credit, as per contra	1,168,405 41	
eal Estate other than Bank Premises	5,469 57	
verdue Debts (estimated loss provided for)	74,566 85	
ank Premises, at not more than cost, less amounts written off	5,407,180 30	
eposit with the Minister of Finance for the purposes of the Circulation Fund	304,500 00	
lortgages on Real Estate sold..	22,680 84	
		73,429,540 27
		$143,504,919 82

. B. OSLER, *President.* C. A. BOGERT, *General Manager.*

AUDITORS' REPORT TO SHAREHOLDERS

We have compared the above Balance Sheet with the books and accounts at the Chief Office of The Dominion Bank, and the certified returns received from its Branches, and after checking the cash and verifying the securities at the Chief Office and certain of the principal Branches on December 31st, 1919, we certify that, in our opinion, such Balance Sheet exhibits a true and correct view of the state of the Bank's affairs, according to the best of our information, the explanations given to us and as shown by the books of the Bank.

In addition to the examinations mentioned, the cash and securities at the Chief Office and certain of the principal Branches were checked and verified by us at another time during the year and found to be in accord with the books of the Bank.

All information and explanations required have been given to us and all transactions of the Bank which have come under our notice have, in our opinion, been within the powers of the Bank.

G. T. CLARKSON, R. J. DILWORTH } of Clarkson, Gordon & Dilworth, C.A.

Toronto, January 20th, 1920.

hile shareholders receive three shares of stock in the new ompany for each share held in the old company.

The President of the company, George H. Chahoon, jr., ho presided at the meeting, briefly outlined the plan recomended by the Executive of the enterprise, stating that it had een arrived at with the view to providing for the further evelopment of the property and in the general interest of aurentide shareholders. The company, he said, had materilly increased its production of sulphite and groundwood pulp, nd had already contracted for the building of two new newsrint-making machines of a daily capacity of seventy tons each. elivery of these machines was expected early in 1921, and ne output has been sold at prices which should prove lucrave to the shareholders.

Brompton Pulp

Annual Dividend is Now on a 6 per cent. Basis, Payable Quarterly

Reviewing the result of the year's operations at the anual meeting of the Brompton Pulp and Paper Co. on Jan. 5, Mr. F. N. McCrea, the president, stated that the first alf of the fiscal period had been a very lean one, so far as usiness and earnings were concerned. Companies engaged argely in the production of newsprint paper had been in a nore fortunate position than those whose output consisted f other lines, such as Kraft wrapping papers and other roducts in less urgent demand at the time. Conditions, owever, Mr. McCrea said, had much improved in the last alf of the twelve months, and he anticipated that the comany was "in for a good year."

As an example of the improvement which had set in, the resident stated that one of the company's subsidiaries, the Odell Manufacturing Co., whose sales in January of last year amounted to only $52,000, had booked business in December amounting to some $381,000.

Following the meeting of shareholders, the directors, who had been re-elected, declared a quarterly dividend o 1½ per cent on the common stock, thus placing the shares on a 6 per cent. basis. Previously the stock paid 5 per cent. per annum.

Imperial Oil Limited

New Issue of Stock Being Made Which Will Raise Fifteen Millions of Capital

Imperial Oil Limited are offering shareholders 200,000 shares of the unissued capital stock of the company at $75 per share, in the proportion of one new share for every six shares held. By this plan the issued capital of the company will be increased from $30,000,000 to $35,000,000, though, as the shares are being put out at three times the par value, the sum of $15,000,000 will be put into the treasury. Payment may be made in full on March 1 or in four equal instalments of $18.75 per share on March 1, June 1, September 1, and December 1.

Gillette Safety Razor Co.

Company Enjoyed Substantial Growth in Business During Past Year

At the annual meeting of the Gillette Safety Razor Co., of Canada, Limited, held in Montreal, on Jan. 27, it was reported that net earnings for 1919 were $821,394, an increase of $306,958, or almost 60% over 1918. An interesting factor in the company's business during the year was a substantial increase

Our production systems supplant guesswork by certainty and assure improved service and decreased costs

Thorne, Mulholland, Howson & McPherson

INDUSTRIAL ADVISORS

Bank of Hamilton Building Toronto, Ont.

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MONTREAL

Riordon Pulp & Paper Company Limited
MAPLE LEAF
BLEACHED SULPHITE
MADE IN CANADA

Offer for Sale

SULPHITE FIBRE WOOD PULP

BLEACHED AND UNBLEACHED

FOR PAPER MILLS

IMPERVIOUS SPRUCE SHEATHING

LUMBER

SPRUCE, HEMLOCK AND PINE, CEDAR RAILWAY TIES AND SHINGLES, SPRUCE CLAPBOARDS

Sales Managers : T. J. STEVENSON, GEO. E. CHALLES

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Subscriptions are based on the service furnished, and are available only by reputable wholesale, jobbing and manufacturing concerns, and by responsible and worthy financial, fiduciary, and business corporations. Specific terms may be obtained by addressing the Company at any of its offices. Correspondence invited.

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Edmonton, Alta.	Hamilton, Ont.	London, Ont.	Victoria, B.C.
Halifax, N.S.	Ottawa, Ont.	Quebec, Que.	Sydney, N.S.
Montreal, Que.	Toronto, Ont.	Vancouver, B.C.	
St. John N.B.	Winnipeg, Man.	Calgary, Alta.	St. John's, Nfld.

C. A. B. BROWN, Superintendent, Toronto

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Catalogue B.

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Everything for the Bathroom.

Write for Catalogue C and Price List.

export trade, especially that with Great Britian and other tlying portions of the British Empire. It was announced at e meeting that negotiations had been completed for the pur-ase of property adjoining the present premises of the com-ny, containing some 13,000 square feet, with the buildings ereon. It is the intention of the Executive to further ex-nd its plant capacity.

Dominion Bridge Co.

rnings for the Past Year Declared to be Most Satisfactory in View of Conditions

Earnings of the Dominion Bridge Co., Limited, during the st year of peace amounted to $1,640,531. This compares with ,477,009 in 1918. After the usual allowances, there remained ,343,305 for disposition, representing earnings at the rate of .6 per cent. on the share capital. With the addition of the evious year's balance, the amount carried forward into the rrent year's account was $3,848,613.

Reviewing the results of the year's operations, G. H. Dug-n, the President of the company, stated to the shareholders: he result is considered satisfactory in view of the conditions taining during the year. The beginning of the past financial ar was practically co-incident with the date of the cessation hostilities; the armistice caused the cancellation of muni-on orders, with whch the shops were filled, disrupting the siness of the company. The adjustment of these muntion ders and of the organization of peace conditions, together th the general public hesitation in placing business resulted very little profitable occupation for the plants and organiza-on during the early months. The costs of both labor and aterial have, contrary to expectations, increased during the ar, and were therefore in excess of estimates.

"During the latter half of the year there was a marked provement. It closed with a fair volume of business and od prospect of an active demand for the present year."

Canadian Car

American Interests Now Secure a Place on the Board of the Company

Changes of considerable importance in the board of the nadian Car and Foundry Co. were effected at the annual eeting of the company on January 25. Two of the former rectors, Messrs. Erskine Hewitt and J. Frater Taylor, tired, and four new directors were added, viz., W. H. oodin, President of the American Car and Foundry Co.; ndrew Fletcher, President of the American Locomotive; ewis L. Clarke, President of the American Exchange ational Bank of New York, and Francis H. Clergue, Mon-eal.

In his address to the shareholders, Mr. Butler dwelt at me length on the importance of the new alliance with the werful companies working in similar and kindred lines to e Canadian Car concern. He stated that Mr. Clergue was e largest individual holder of the company's stock at the esent time, after some 26,000 shares had been transferred him to Mr. Woodin.

The various plants of the company, Mr. Butler stated, re never in better condition than they are at present, and at the car concern was in a good financial position. The 19 business, he said, had approximated $33,000,000, and the mpany had $8,000,000 of orders on the books at the begin-ng of the current calendar year. Last year, on the same te, unfilled business had amounted to $17,000,000, but, vertheless, a good average business was expected in 1920.

Tokyo

Japan's increasing foreign trade is characteristic of the intelligence and energy of the nation.

Canada's trade with that picturesque country has increased rapidly and continues to expand.

Tokyo, the capital of Japan, home of the Mikado, is in touch with every corner of the Japanese Empire. Thus Canadians having trade relations with the Japanese, will find the Tokyo branch of the Park-Union Banking Corporation of far-reaching service.



UNION BANK OF CANADA

Park-Union Foreign Banking Corporation jointly owned and controlled by National Park Bank of New York and Union Bank of Canada. 406

THE ROYAL BANK OF CANADA

Capital Paid Up	$17,000,000
Reserve and Undivided Profits	18,000,000
Total Assets Over	500,000,000

HEAD OFFICE - MONTREAL

BOARD OF DIRECTORS:

Sir Herbert S. HOLT, Pres.	E. L. PEASE, Vice-Pre
Jas. Redmond	Sir Mortimer B. Davis
G. R. Crowe	G. H. Duggan
D. K. Elliott	C. C. Blackadar
Hon. W. H. Thorne	John T. Ross
Hugh Paton	R. MacD. Paterson
A. J. Brown, K.C.	W. H. McWilliams
W. J. Sheppard	Capt. Wm. Robinson
C. S. Wilcox	A. McTavish Campbell
A. E. Dyment	Robert Adair
C. E. Neill	T. Sherman Rogers, K.C.

OFFICERS

E. L. Pease, Man. Director; C. E. Neill, Gen. Manager; M. W. Wilson, Supt. of Branches.

Branches in every Province of the Dominion of Canada and in **Newfoundland**; in **Havana** and throughout **Cuba, Porto Rico, Dominican Republic, Haiti, Martinique, Guadeloupe; Costa Rica**, and **Venezuela**; in **Antigua, Bahamas, Barbados, Dominica, Grenada, Jamaica, Montserrat, Nevis, St. Kitt's, Trinidad, British Guiana, British Honduras.**

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Additional Reports on 1919 Conditions

OWING to delays in the receipt of some of the contributions sent in for publication in the January issue and also to the fact that a number of reports were crowded out at the last minute, it has been deemed advisable to continue this valuable feature into the present number, and on this and following pages will be found a number of additional articles dealing with 1919 conditions and the outlook for business in the year 1920.

Clothing Manufacturers and the Labor Problem

By C. B. LOWNDES
President, The Lowndes Co., Limited, Toronto

THE transition of the men's clothing business from a war to a peace footing resulted in a tremendous unsettlement throughout the entire industry. Prior to the armistice men were continuously going into khaki, and the Canadian clothing manufacturers suffered materially in reduced volume of business throughout the period following the commencement of hostilities.

At the end of 1918 there was a very great scarcity of business, and when it became mooted that there was the possibility of getting export orders for clothing and an arrangement was made effective by the Canadian Government through the creation of credits in favor of Roumania, it was naturally grasped at by the great bulk of those engaged in the business. Following the placing of this business, in which time cloths and linings had to be bought and patterns and models developed, demobilization commenced with consequent increase in the demand for domestic trade. As greater numbers of soldiers were discharged, the retail trade were cleaned out of all classes of men's garments and stocks were rapidly depleted all over the country. The demand for spring lines increased enormously and fall bookings were exceptionally heavy and far beyond the expectations of the great bulk of Canadian clothing makers.

Increasing Disturbances

When business commenced to advance, it became noticeable that there was an increasing disturbance in the labor situation, and at once the evils which had pursued the trade for some time commenced to show themselves. The shortage of workers became more pronounced month by month, and the fact that no help had been trained during the period of the war years, that the source of supply for the class of help that usually engaged in the clothing business had been cut off, that there had been a tremendous change in four years through natural decrease in the industry by way of marriages and deaths, and that large numbers had left Canada during the period of hostilities in order to avoid military service, all these factors combined to place the industry at the greatest disadvantage it has ever been in in its history.

Manufacturers realizing the difficulties of the situation and the possibility of their being unable to get their goods delivered, commenced to bid for labor, and the workers, realizing that the manufacturers were deluged with orders and were dependent entirely upon their services for delivery, encouraged the practice, until it was quite evident to many that the situation had every aspect of resulting disastrously unless it could be promptly controlled. Many manufacturers were of the opinion that labor in its attitude was unfair to the industry, while a few more moderate in their point of view recognized the principle that, when three jobs were open to one man, the individual so placed was likely to be a picker and chooser and the advantages of the laws of supply and demand were all upon his side. With conditions in this state, production gradually diminished, and despite the introduction of policies of various kinds dictated by expediency, there was no general improvement in the situation, as the objects sought by labor were the recognition of its right to organize, to have collective bargaining, and compulsory arbitration. With this situation governing, the early months of 1919 were fraught with continuous difficulties to the manufacturers.

Trade Cleaned Out of Stock

As indicated above, when the travellers went on the road for fall bookings, they found the retail trade practically cleaned out of stock, and in addition to the labor difficulties, manufacturers found increasing difficulties in getting cloths from the mills owing to lessened production created by a shortening of hours in practically all textile lines. Fall orders were booked on the basis of the wages governing during the spring months, and herein the manufacturers of the country were, generally speaking, very heavy losers, for no sooner were fall orders booked than the individual demands of the workers became greater and greater. In addition, collective demands were made which were acceded to in order to maintain production.

At this point a few manufacturers in Toronto, recognizing that if the goods were to be manufactured and the retail trade to be supplied it would be necessary that steps be taken to deal with labor, formed what is known as the Associated Clothing Manufacturers, to which 18 houses subscribed their signatures. This organization met the officials of the Amalgamated Clothing Workers of America, representing the employees, and an agreement was reached, the result of which indicates a control in the clothing industry of wonderful significance and pointing to the possibilities of mutual negotiation between employers and employees. Under this agreement the parties thereto agreed to bring a government into the market, and in the course of the early fall months, unitedly joined in appointing Dr. H. B. Sharman, a former professor of Chicago Unversity and a gentleman of



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Cheap factory sites including water-front sites with private power development privileges.
Shipping facilities over 11 steam railway lines and by river and canal to the seaboard and great lakes.
Located in the most populous part of Canada, midway between Quebec City and Windsor or Detroit.

And there is much more you ought to know about Hull. Let us explain in detail. All information will be given cheerfully on request. Write to the

Industrial Commissioner
HULL - CANADA

Write for full details

Bring Your Industry to HULL

outstanding scholastic attainments and considerable business experience, as Impartial Chairman governing the Board of Arbitration, his decision in all cases to be final and to be accepted by both sides without demur.

With the appointment of this Board of Arbitration, under Dr. Sharman, the employers appointed as Labor Manager for the Toronto market Mr. A. A. MacIntosh, formerly of the Toronto *Globe*, but more recently Managing Editor of the *Advertiser* of London, Ont. Mr. MacIntosh occupies a new position in Canadian industrial life, being virtually in control of all arrangements made on behalf of employers with the representatives of the workers. His decisions, in so far as they affect the employers, are final, and it is his duty to interpret the policy of the organization which he represents so that it shall result to the advantage of those connected with it. The Amalgamated Clothing Workers of America have as their representative Mr. H. D. Rosenbloom, who himself prior to becoming associated in organization work was a worker in the ranks of factory employees. Among employees he is recognized as both fearless and capable in unholding the rights of those he represents, and it is generally conceded that he has a keen appreciation of what is necessary for the proper protection of the industry as a whole. The officers of the Associated Clothing Manufacturers are: President, C. B. Lowndes of the Lowndes Company, Limited; Vice-President, Wm. Johnston of Randall & Johnston, Limited; Treasurer, T. W. Learie of W. R. Johnston & Company, Limited; Secretary, R. Schutz of the North American Tailors, Limited.

Noticeable Improvement

With the signing of the agreements between the parties interested, there was a noticeable improvement not only in the stability of the market but in the output of the workers, and conditions to-day are tremendously better than was the position during the early months of the past year.

The problem of the clothing manufacturers in respect to getting goods has almost been as vital as the problem of getting the goods made after they had been secured. Following the armistice, many American woolen manufacturers for a time were panicky and swept into Canada with goods at considerably reduced prices. Canadian manufacturers, having a better grip of the situation, bought freely. Unfortunately for them, however, the American market suddenly stiffened and American mills and agents, finding a higher price for their stuff, in many cases, allowed the orders booked at the low prices to go by the board, turning their attention to selling the goods at higher prices, and no doubt with the ultimate intention of delivering should the prices subside. This experience naturally has not enhanced the reputation of many United States manufacturers, and during the last few months the tremendous depreciation of the Canadian dollar has done more than anything else to drive trade in this country into a realization that it is better to buy at home or to buy in the Old Country, particularly in view of the fact of the advantages to be gained owing to the low rate of sterling exchange.

During the past year Canadian clothing makers have had very little demand for what is commonly known as cheap goods. Most buyers having insisted upon having the better quality article despite the fact of very heavy advances on the price of such. The trends of values, however, have been continuously up, and here it may be said that with cloth prices still rising, and labor costs not decreasing, it is altogether likely that high prices will maintain for some considerable time in the future.

The outlook in the clothing industry shows many abnormal situations, but from all angles, it is unquestionably fav-

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Is used the world over in Modern Industrial Plants, Power Stations, Waterworks, Mines, Pulp and Paper Mills, Salt and Chemical Plants, where highest efficiency, reliability and high-class engineering are demanded.

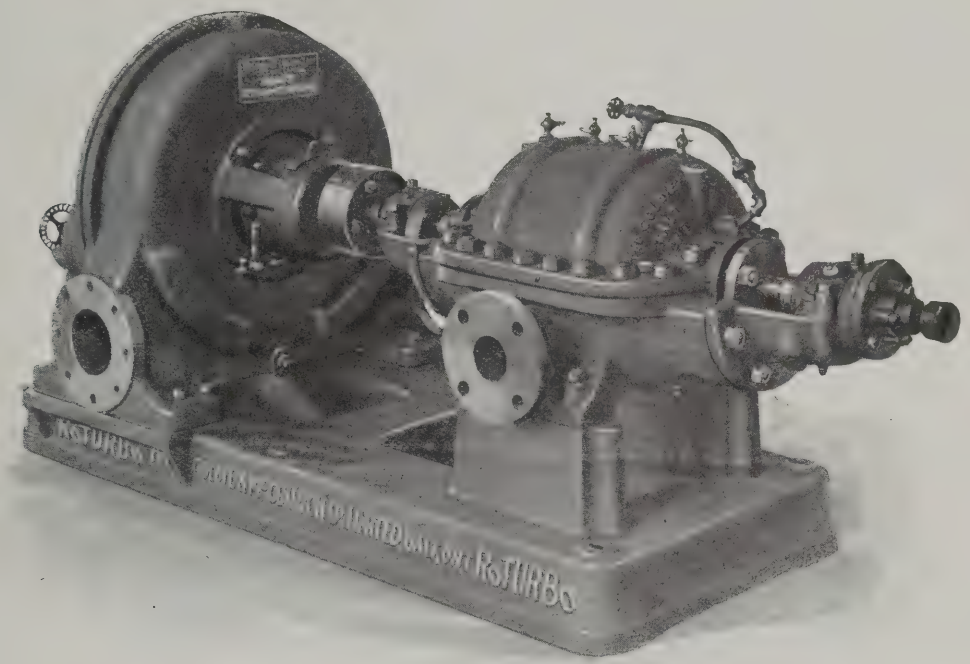


Illustration shows a REES' RoTURBo Multi-stage Pump direct connected to Goldie & McCulloch "WAIT" Steam Turbine, recently built for the Salts & Potash Co. of Canada, Limited, for pumping brine.

REES' RoTURBo Pumps provide a very high and sustained efficiency over a wide range of duties which means a saving in power costs. The self-regulating feature of RoTURBo design is responsible for this saving, and this same feature protects your prime mover from overloads on a decreased pressure head, eliminating expensive delays and costly repairs.

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orable. Most houses are well booked for spring delivery, and providing the cloth makers are in a position to fill orders which have been taken, practically the entire industry should enjoy an excellent season. The prospects for fall 1920 are also good owing to the great shortage of heavy goods, particularly overcoats, during the past fall months.

While the labor market locally may be said to be sound at the moment, it cannot be said that it does not offer elements of potential disturbance owing largely to the fact that the whole trade is not associated in the movement for a better understanding between workers and those who engage them. There has been a tendency during the year to eliminate the piece-work methods, and this is regrettable, but is merely another evidence of the fact that workers will not produce under conditions of prosperity as they will produce under conditions of adversity. It has seen also a movement looking to the elimination of the contract shop and in many respects this is not an unmitigated evil. There will undoubtedly in the next few years be a tremendous impetus to inside manufacturers, which condition will be maintained once it is proven to employers that as much can be produced in the inside shop as has formerly been said to be produced in the outside contract shop.

SCARCITY OF LABOR AND MATERIALS HAMPERS

By C. F. Fell

Hamilton Carrhart Cotton Mills Limited, Toronto

We are experiencing a great deal of trouble in endeavoring to get experienced labor, and also raw materials. While we have been endeavoring to increase our output, due to being heavily oversold, we find that both these conditions mentioned are retarding our progress far more than we are able to comprehend.

As regards marketing conditions, they are very good, and the demand exceeds the supply. We, of course, benefited on the Roumanian order placed through the Trade Commission at Ottawa, and believe that through this means there was a greater demand by the domestic trade.

Unless the mills can increase their output, the outlook for 1920 will not be very bright, and until raw materials are produced in larger quantities, it will be utterly impossible to expand. We had contemplated making several extensions to our plant in order to enlarge our business, but find that owing to the mills restricting the booking of orders, and non-deliveries of contracts placed in the past, it may not be possible for us to make these extensions as at first intended.

BETTER CLASS GARMENTS IN REQUEST

By Jno. A. Northway

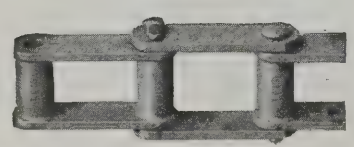
John Northway & Son, Limited, Toronto.

The labor in this trade has very largely been foreign, mostly Jews, and since the stop in immigration there has naturally been a great shortage. In our own plant we have had so much trouble with this class of labor that we have discontinued employing same and are building up a staff of a better type. In raw materials, the advance has generally been as high as 300 per cent. We have not increased output much on account of the foregoing conditions.

We find quite a large demand, especially for the better class of garments, more so than before the war, the public demanding garments made of fine qualities of silk and wool, which we might say has a good deal to do with the high price of garments. As all raw materials are still advancing, garments must necessarily follow. We have done nothing to speak of in the export line.

We anticipate that business will be very good for the next few months if there is not too much disturbance in the labor markets at home, in the United States or in England, which would effect the delivery of raw materials to us.







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Chains for Every Purpose

THE wide variety of Link-Belt Chains for Conveyors and Power Transmission purposes should lead you to adopt Link-Belt as your standard chain for these purposes.

You can always identify Link-Belt products. This trade-mark >——————< appears on every link. It is your guarantee of superior quality in material, design and workmanship. Look for it—demand it.

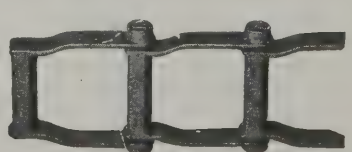
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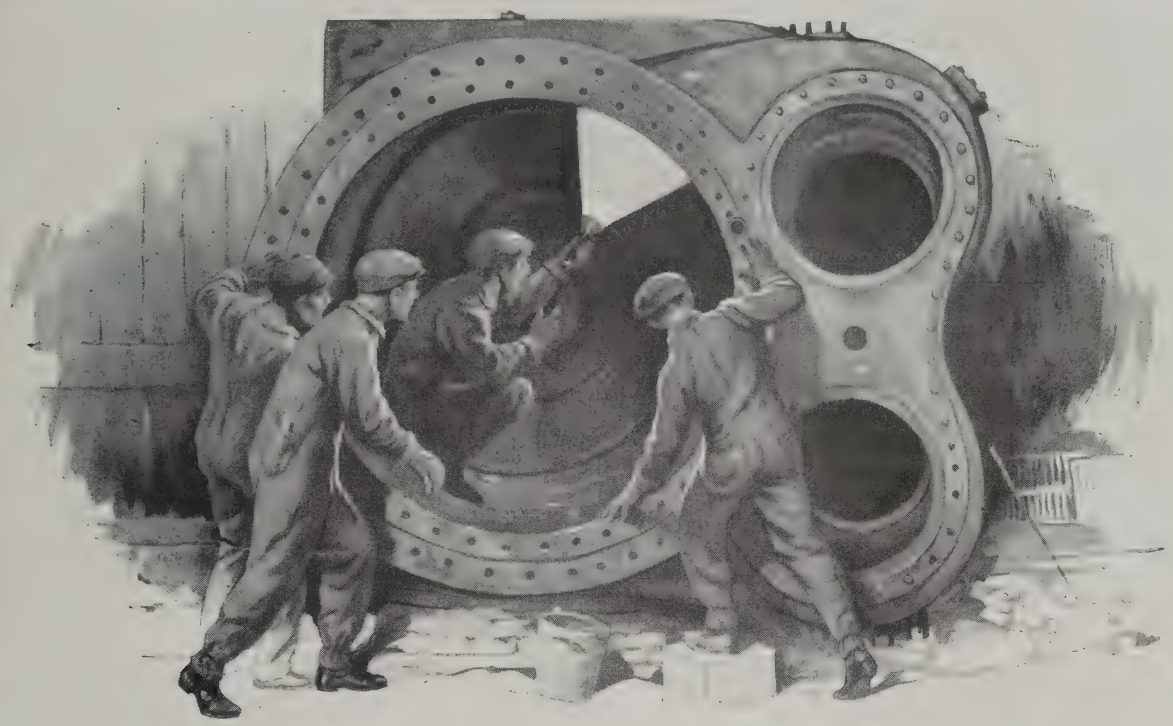
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LABOR VERY SCARCE IN BRITISH COLUMBIA

By Jas. B. Thomson
Jas. Thomson & Sons, Limited, Vancouver, B.C.

Skilled operators are very scarce and very hard to get. The minimum wage, which was set in September last, makes it necessary to pay girls for work of this kind $14 per week as a minimum. It is thought that possibly operators will be easier to get now that the labor market is replacing certain number of girls with men, but the great difficulty is that that class of operators are not skilled, and the minimum wage award has set such a high figure on apprentice help, *i.e.*, the sum of $11.00 per week, coupled with the fact that you are only allowed one in seven of this class of help, that it makes it very hard to recruit labor in the West.

Regarding raw material, there has been a shortage of this. In many instances we were forced to buy in the United States at higher prices than we should have had to pay were the Canadian mills in a position to make delivery of cotton piece goods.

We were successful in increasing our output to a certain extent, but not as much as we would like. The demand at all times for the product of our factory has been greater than we were able to supply, even though the prices, owing to market conditions, have had to be steadily advanced. At the present time the output of our factory hardly goes beyond the confines of the province of British Columbia. We have had some very tempting offers to export, but it has been impossible, owing to lack of both labor and material.

As to the future, indications at present are that the demand will be good for the coming year for the product of our factory in our own province, but we are constantly asked by merchants in other provinces, and also from Australia and New Zealand, to see if we cannot supply them with merchandise. What we need in British Columbia most is more skilled operators. Machinery for expansion we can easily get, and I think by importation we could readily obtain additional cloth, but there is not much encouragement to put in additional plant with such a scarcity of labor as exists. There are other lines we will manufacture when labor conditions change and we can get skilled employees, such as, particularly, women's garments and possibly cheaper line in men's ready-to-wear clothing. For the present we have to content ourselves with the manufacturing of shirts, overalls and mackinaw clothing.

CONDITIONS IN THE WHITEWEAR INDUSTRY

By J. B. McCarter
President, Eclipse Whitewear Co., Limited, Toronto

Our experience in manufacturing for the last two years has been difficult owing to the scarcity of labor and raw materials, and the demand has been so great that it has been impossible for us to take care of all business offered. In 1918 our output was the largest in our history to date, and in 1919 the Eclipse sold more goods from the 1st of September until the 15th of November than our entire output the previous year, forcing us to call our travellers off the road and refuse further business. Even if we were able to obtain more labor, it is doubtful whether we could do more business or make use of the extra help on account of the scarcity of raw materials. We have practically been forced to purchase all our cotton in the one market, England being out of the question, both in deliveries and in values; and the rate of exchange much against us in the United States. We have practically given instructions here not to purchase anything in the States, on account of their high exchange.

Regarding export business, we have been doing considerable in New Zealand, but have been compelled to recall all samples from that country, as we did not think it good policy

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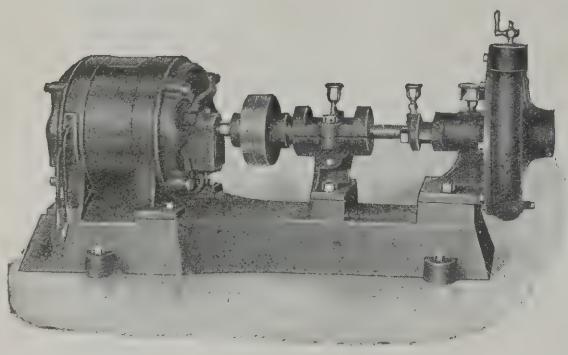
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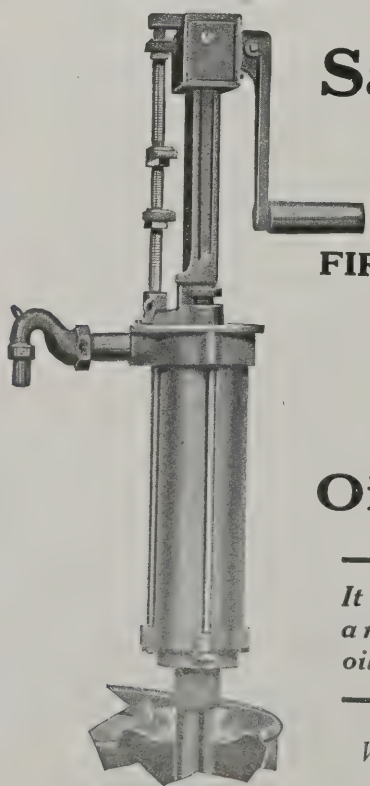
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to try to export under the conditions. We think it time enough to take up export business when we are in a position to supply our home country's demands. As far as the future is concerned, we see no likelihood of any change or easing up. We are at present making plans to carry on in 1920 and 1921 along the same lines as 1919 and 1920.

CLOTHING DEMAND LIKELY TO CONTINUE

By J. J. Greene

Managing Director, W. E. Sanford Mfg. Co., Ltd., Hamilton

Advances in wages, with steady employment, combine to make labor conditions with us more favorable at present than heretofore. The condition with regard to our raw materials continues difficult. Deliveries from the mills are slow and repeat orders almost impossible to place, and where possible, only at an advance. One mill advises us that they will take a season off in order to catch up.

We are enlarging our capacity by the building of a new factory, not only to increase our output but also to make conditions more favorable for our workers.

The demand for our product is good, particularly in the medium and better lines. With others we expect to be put strenuously to it to satisfactorily fill our coming season's orders. We cannot say that the trend of values is downward or even stationary. In many lines the direction is upward.

We have done a little export business, but find that the home demand is so large, skilled labor and the difficulties of procuring materials so great, that we feel we have to practically restrict our efforts to our own country.

As to the outlook, we are fairly optimistic. The needs of the consumer combined with the scarcity of raw materials and the difficulty of getting them would seem to us to indicate that a demand will continue which it will be for those who are able to do so to meet and supply.

OVERALL MANUFACTURERS HAVE DIFFICULTIES

By O. A. Matthews

R. G. Long & Co., Limited, Toronto

To make a long story short, we would state that the difficulty in securing raw materials is increasing every day, and the skilled labor in the needle industry has reached an acute stage. As far as the future is concerned, we would not venture an opinion because of the various elements of uncertainty both as regarding the procuring of materials and the problem of skilled labor.

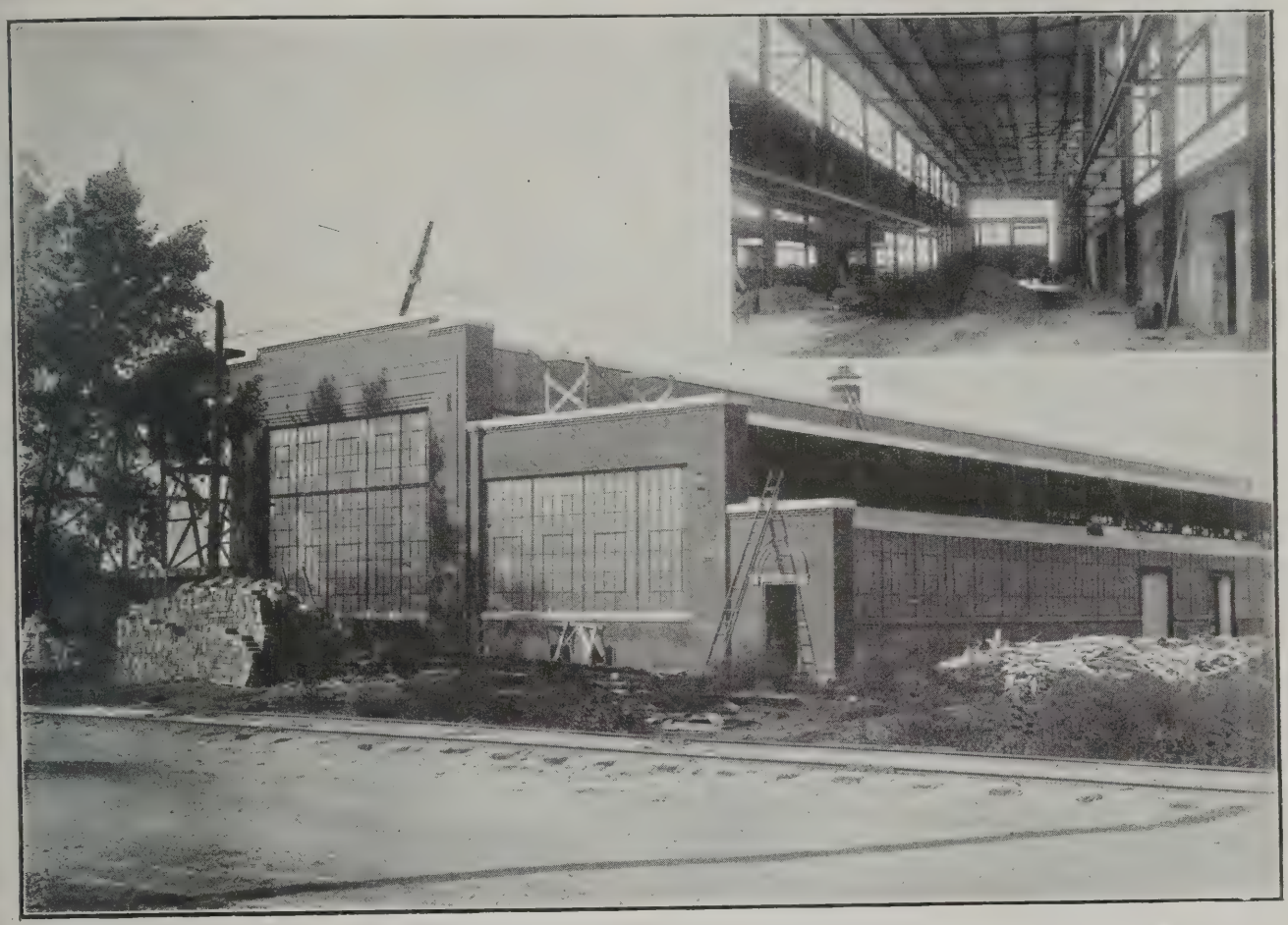
MEN'S NECKWEAR BUSINESS A RECORD

By A. T. Reid

President, A. T. Reid Co., Limited, Toronto

The demand for men's neckwear during the past year has been quite unprecedented owing mainly to two outstanding conditions: First, the great scarcity of silk materials because of lessened production; second, the increased and abnormal demand for neckwear caused by the return and demobilization of our Canadian troops. These two conditions, allied with the trade generally being particularly large in all branches and departments of commercial life, have made the year 1919 possibly the largest in volume and value in men's neckwear business of any previous year in the history of this country.

While in the retrospect these are the summarized facts, we have in prospect for the coming year the promise of a business, if not equally large, one that will prove to be among the best. Retail stocks are in no way heavy; indeed, through the inability of the manufacturer to fulfil more than 50 per cent. to 60 per cent. of the orders received, merchandise in the retailers' hands must be in greatly restricted quantities. We can at present see no reason why the demand for merchandise should not be equal to or approximately as



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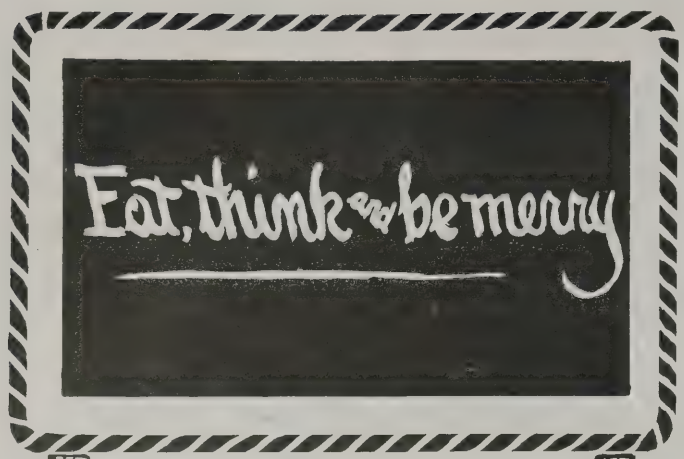
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good during the present year. This, of course, largely depends upon the maintenance of the present high rate of remuneration paid to all kinds of labor, and possibly a continuation of the tendency to spend to the maximum—a habit we will all agree none too wise but all too general.

In the minds of many the continued advance in the cost of all materials, such as silks, lining and other items that enter into the production of a finished tie, plus the abnormally high wages paid to operators, may bring the cost to the consumer to the point where he may hesitate to expend so much for what a few years ago would have seemed so little. As applied to men's neckwear, however, this will not occur unless in respect to its relation to other commodities of a kindred kind.

TRADE LOOKS FOR HIGHER-PRICED GOODS

By W. A. Brophey

Managing Director, Tooke Bros., Limited, Montreal

Our experience regarding labor in 1919 is that experienced labor is hard to get, and the young people coming in untrained do not seem to want to settle down and learn the business, as before the war, and will stay a few weeks only. Raw materials are scarce and prices advancing daily. Our production has been increased, but our present output does not compare favorably with a year ago, as we have had to put in more machines in order to secure a greater production.

The tendency of the trade is for higher-priced merchandise; we do not find the same demand for cheap goods as existed before the war. Market conditions are very satisfactory, as the demand for our merchandise is much greater than the supply. Export business has not been a factor with us; in fact not being able to look after the home trade, we have not gone after foreign business.

We size up the outlook for the coming year as good; in fact we think the big demand for merchandise will keep up for at least two years. Our present manufacturing facilities are totally inadequate to keep pace, consequently we are adding 15,000 square feet to our main factory; we are adding a storage building to our uptown factory, and we are opening up a branch factory in Longueuil, and we hope by these enlargements to be able to handle increased business.

DIFFICULT TO SUPPLY SHIRTS AND COLLARS

By F. W. Stewart

Managing Director, Cluett, Peabody & Co. of Canada, Limited

As regards labor, conditions have been satisfactory except that we have not been able to secure all the operators which we require for our plant at St. John's. We have not suffered from supply of raw materials, and general operating conditions have been fairly satisfactory.

Our production for several months past has shown a marked increase over last year, the tendency being a demand for a better quality of goods, and it has been very difficult to satisfactorily supply the demand for goods of the highest grades. We have not accepted any export business, and we have been using our efforts to supply the demand from our own market.

From the present outlook, it appears that the demand is likely to keep up for some time to come, as it will likely be three or four years before we are in a position to catch up with the normal demand from our production, and build up our depleted stocks. It is doubtful if manufacturing facilities will be adequate to keep up with the demand during that length of time. To assist us in taking care of this situation, we have opened a small auxiliary plant in St. John's for manufacturing collars, and we are also opening up branch factories at Sherbrooke, for collars, and Montreal, for shirts.

It would appear at the present time as though the supply of cotton materials during the next year or two will be very

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limited, owing to the enormous demand which is now being put upon Great Britain for these goods from all parts of the world, and it does not appear as if the U.S. and Canada will be able to assist very materially in taking care of this demand, as our home markets will likely tax our industries to the limit for some time to come. Prices of cotton materials have been advancing very rapidly, and consequently our product for the next year or two must be priced higher than at any period previous to this date.

HAT MANUFACTURERS VERY BUSY

By Gordon C. Crean
Robert Crean & Co., Limited, Toronto

We have found labor, especially female help, very scarce, and raw materials scarce and dear. Demand for our goods has been very heavy, and we find the demand running to the higher grade goods, especially made-in-Canada velours. We have done some exporting, but had to cease, as we could not take care of our own market. We hope when we can increase our output to be able to again resume export business. We expect for the next six or seven months to be running to our utmost capacity. We have already enlarged our capacity by about 25 per cent. and are contemplating a further extension.

CORSET PRODUCTION BEHIND THE DEMAND

By Crompton Corset Co., Limited, Toronto

Labor conditions with us are the principal drawback, as we are only able to manufacture about half the quantity which we could dispose of if we had a sufficiently large staff. We have been fortunate enough to obtain sufficient materials, but, of course, cannot say how long this will continue, as the mills appear to be completely filled up with orders, and are very backward in accepting new business. It is practically impossible for us to import very much of the staple lines in materials owing to the condition of affairs in the United States, where they appear to be even worse than we are here, as far as the corset business is concerned.

CARPET PRODUCTION ON THE INCREASE

By H. Quarmby
Guelph Carpet & Worsted Spinning Mills, Limited, Guelph

We find that we are unable to secure an adequate number of skilled operatives, although the soldiers who recently returned have made labor conditions rather easier. Raw materials are extremely difficult to secure in large quantities, and wages are about 25 per cent. higher than they were twelve months ago.

In our carpet department, for the two months Oct. 1st to Nov. 30th, our production was 27.50 per cent. greater than in the same period last year; in the worsted spinning department the production is stationary.

High-class goods are greatly in demand, and prices have an upward tendency.

We look for two or three years of good trade, as the world is short of all kinds of goods, but we think that with the many additions being made to factories, Canadian manufacturers will be able to supply the requirements of the country within a short time. We are making an extensive addition to our worsted spinning plant which, when completed, will double our yarn production.

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Building Materials

DOUBLED OUTPUT OF BRICK IN 1919

By F. B. McFarren

General Manager, Interprovincial Brick Co. of Canada, Limited

We might explain that our company started operations in 1914, turning out our first brick just as the war commenced. Practically all construction work ceased and many brick manufacturers having large stocks to liquidate reduced prices to such a level that it was almost impossible to sell at a profit, and the demand was extremely limited. Fuel and labor, however, were plentiful and selling conditions gradually improved as many manufacturers closed their plants. During 1916, 1917, and 1918 the demand continued to improve, and as many of the plants were still closed down it became less difficult to dispose of the material produced. Fuel and labor became scarce and great difficulty was latterly experienced in procuring sufficient fuel and labor to take care of the requirements. At times the car supply was inadequate and constantly increasing freight rates made the distribution of manufactured goods increasingly difficult in various markets. We believe the rate increases have been greater in proportion on brick and clay products than on almost any other commodity.

During 1919, we found it necessary to double our output to cope with the demand, and while wages have considerably increased, we have found it easier to secure sufficient labor.

During the period outlined, wages have more than doubled and the price of fuel is also more than double, consequently necessitating increased prices. The cost of buildings and kilns has also more than doubled during the period and many manufacturers of brick have discontinued operations and in view of the greatly increased cost of new construction and increased working capital required, we believe that it will be a considerable time before production is back to the pre-war basis.

While a large amount of work has apparently been postponed due to the increased cost of construction, there has been a great shortage of houses, which has necessitated a large amount of housing construction, and there appears to be a great deal of larger work contemplated for the coming season. At present we find that the demand for our product is much greater than the supply and we are constantly adding to our capacity.

HIGH BUILDING COSTS AFFECT CEMENT INDUSTRY

By F. P. Jones

General Manager, Canada Cement Co., Limited, Montreal

Manufacturing conditions are, at present, in most localities very difficult, not so much on account of the scarcity and high price of labor, but because labor is not producing the same per hour as it did prior to the war. Raw materials are as a rule very high priced and difficult to get. General operating conditions are of necessity affected by the above, namely, not getting the same production per hour as we did, and difficulty of obtaining raw materials. Output has decreased as the demand for our production has not been good during the past four years.

Demand for our product is poor, mostly on account of the cost of building to-day, which is a consequence of the high cost of labor. A large number of buildings of all classes and kinds, besides a large amount of construction work, roads, etc., are required in the country, and undoubtedly, business would be good if people could get a reasonable return on capital expenditure, but the writer is not optimistic regarding the future, because he does not believe these capital expendi-

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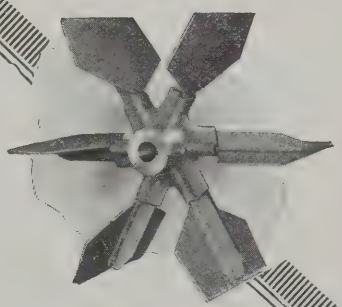


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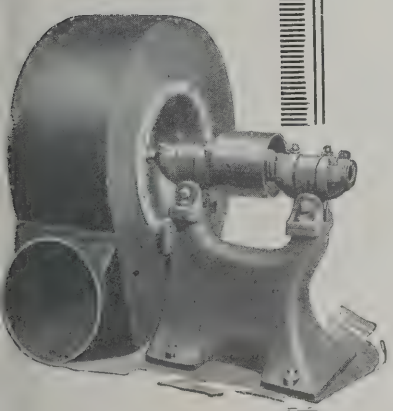
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tures are justified until conditions are such that a man spending $100 in labor, will be able to get $100 in work done.

Values have not in our line gone up as much as in most of the others.

The export field is very attractive, but difficulties are: (1) Lack of ocean tonnage; (2) Irregularity of sailings; (3) In our business, the difficulty of obtaining suitable package.

The outlook for the next few months in our business is not encouraging. We have not enlarged any of our plants, and have not been running for the past four years at more than 33 per cent. of our capacity. We have not introduced any new lines.

DEMAND FOR CEMENT REPORTED GOOD

By John G. Lind
General Manager, St. Mary's Cement Limited, St. Mary's

Manufacturing conditions during 1919 have been fairly good with us. We have had no labor trouble; the transportation companies have furnished us with plenty of equipment, and we have increased our output by about twenty-five per cent. Regarding marketing conditions will say that the demand for cement has been exceptionally good. The price at our mill dropped 10c. per barrel last March. We are not properly situated for export business. The outlook for 1920 business, we expect, will be good. Cement is a low class commodity carrying a high freight rate, and the conditions make it more economical t operate smaller plants near strategic centres.

DEMAND FOR BABBIT METALS INCREASES

By G. F. Allen
Manager, Hoyt Metal Company, Toronto

We have had no trouble whatever with labor. We have not a great number of employees so it is an easy matter to adjust things in our plant. We have increased our output considerably. The demand for our product, Babbitt metals, etc., and kindred lines has been very great last Fall, and we have done the largest business in the history of the Company.

We believe 1920 is going to be a big year—the biggest in our history, provided of course general strikes do not occur all over to upset trade conditions. As far as exporting is concerned we do not export from this plant, except to Newfoundland. Other export business is taken care of by our London office.

DEMAND FOR ROOFING RATHER LIMITED

By J. O. Thorn
General Manager, Metallic Roofing Co. of Canada, Limited

Labor, speaking generally, has been costly and rather inefficient. Raw materials have been very high in price and difficult to obtain. Transportation has been rather slow and unsatisfactory, and has advanced 40 per cent. in cost. General operating conditions have been rather more difficult than usual. The output, however, has been increased, although the output per man shows a dcrease, owing mainly to lack of skill and want of energy.

The demand has been rather limited owing to high prices, cost of transportation, shortage and high cost of labor for constructing buildings. The export business has been seriously interfered with by war conditions.

The outlook, so far as business in Canada is concerned, appears to be fairly good, but raw material is very high in price and exceedingly difficult to obtain.

The cost of production is abnormally high, all of which has a tendency to check sales.

We have not enlarged our capacity, because during the war we have been unable to operate more than 50 per cent. of our capacity, but we have in view making extensions, providing raw material can be obtained and that labor conditions are reasonably satisfactory.



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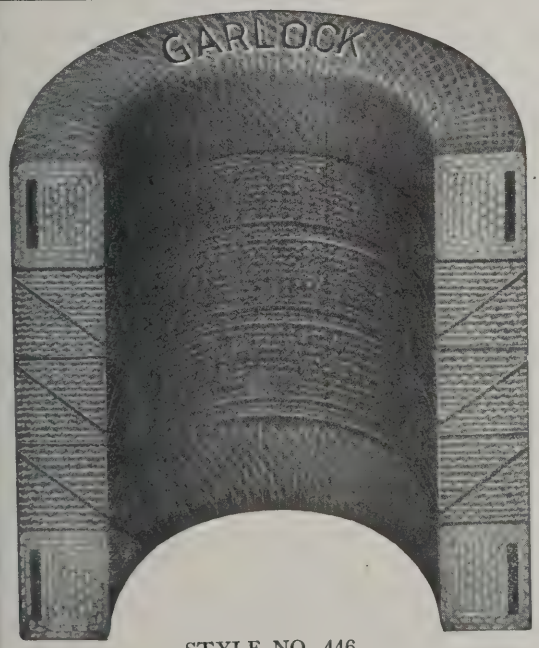
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Miscellaneous Industries

PULP INDUSTRY IN PROSPEROUS CONDITION

By Quebec Manufacturer

Our experience has been that we have had sufficient labor to carry our industry along to full capacity. There has been more or less unrest, the same as other plants have experienced, but nothing serious. Raw materials of all kinds are very high, in some cases almost impossible to procure. Transportation to some points has been entirely satisfactory. To other points, where foreign cars were required, it has been rather difficult at times. Climatic conditions have been entirely satisfactory. We have increased our production very materially during the last six months.

Tendencies in the market for pulp and paper have been upward, in regard to both demand and prices. The marketing conditions have been extremely good. Our experience in the export trade has been that we could have increased it, had we had the goods. Owing to the strong home market we have been unable to increase our export trade.

The paper and pulp industry looks to be in an extremely prosperous condition for the next few months. There will be no trouble regarding distribution. The only difficulty will be in getting sufficient production to distribute. The production of newsprint will be very much increased within the next 18 months, as several hundred tons per day of new capacity will be on the market.

The paper and pulp industry, we consider, is in a very stable condition, and will be for some time to come, and, furthermore, will be on a very profitable basis, the factors contributing to same being the natural increase in the use of paper from year to year, and the fact that no mills were constructed during the war period.

ANTICIPATES BIG YEAR IN 1920

By Wm. R. Vendall

General Manager, Richards-Wilcox Canadian Co., Limited, London

If the money market holds together, we expect 1920 to be the biggest year Canada has ever seen in the output of manufactured goods. The only obstacle in sight seems to be a question of capital, whether there is sufficient money available to finance the needs of the world on the present price basis.

We are enlarging our output constantly, and have further factory extensions in view for spring. We feel that it is incumbent upon Canadian manufacturers to strain themselves to the utmost to produce in Canada as large a percentage as possible of the goods consumed in Canada, and something additional for export trade, and with that idea in view, we are constantly adding to our line items which have been coming in from the States.

In our view, the thing that requires the greatest attention at the present time is to secure the fullest possible co-operation of all our industrial forces, to remove antagonisms and get everybody pulling together for the common good.

DEMAND FOR GOODS SOMEWHAT REDUCED

By F. H. Hopkins

Managing Director, Dominion Wire Rope Co., Ltd., Montreal

We have not increased our output. The demand for our class of goods since the armistice has been very materially reduced, and the demand at present is only about 50 per cent. As regards labor, we had our first trouble during the past year. So far as raw materials are concerned, conditions were a little better in obtaining deliveries.

The class and kind of goods being called for are about as formerly and the value has been materially reduced. We



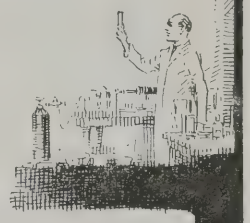
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have not been able to get into the export field on account of both English and U.S.A. advantages over us by facilities of shipping and larger stocks on hand.

We believe that the tendency for the next few months will be more satisfactory, as the general feeling is that stocks can be replenished in place of holding off for better prices. We are not enlarging our plant, as we find we have much more capacity than the present demand warrants. We have not added any new manufacturing lines.

GRINDING WHEEL BUSINESS GROWS

By G. R. Harvey
President, Hart Wheels Limited, Hamilton

Labor conditions have been satisfactory as to the number of men obtainable, but as a whole they are not as efficient. Raw materials have been available but the price has been on the average 10 per cent. higher than a year ago. We have not increased our output owing to lack of orders.

The demand for our goods seems to be increasing, with the trend of values upward. We have a good deal of correspondence *re* export trade and are sure it will lead to some good business. As the grinding wheel manufacturers in the United States are at present as busy as they were during the war, and as a result of the present high exchange rate, we expect to receive a considerable volume of orders which formerly went to U.S. firms.

We have enlarged our plant and could take care of four times our present business. We have also introduced a new line of mower knife hand files and the sales of these are very encouraging.

DISCONTINUE MAKING LOWER GRADES OF CARPET

By Ontario Manufacturer

We have experienced difficulty in obtaining labor, and what we have had has been far from satisfactory. Raw materials have always been procurable, of course, at greatly advanced prices; but receipt of same has often been delayed and quantities curtailed.

Our production in yardage is slightly less than that of a year ago, but the value of same has considerably increased. We are running at about 60 per cent. of our capacity. We have almost discontinued the making of lower grades, the demand for same having fallen off. We could have easily booked 50 per cent. more business than we have accepted.

We have never been exporters, though we have been offered, during the past six months, good orders from Australia, New Zealand, South America, and some even from the United States.

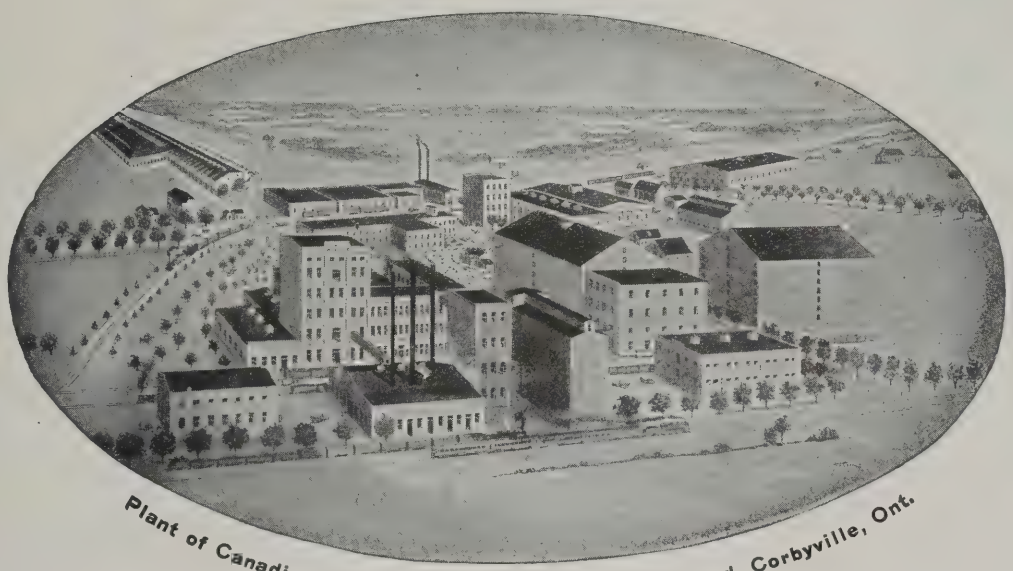
As to the outlook, retailers' stocks are not large. Small buyers are quite conservative in their estimate of future requirements, but the larger dealers, and those who generally size up the situation best, have placed large orders, and are anxious to place still further for delivery as far off as 1921. It looks very much as if the British manufacturers will be able to deliver a fair amount of goods next year. They are quoting prices which compete with ours. I do not think that dealers will be able to obtain their full requirements during 1920. We have considered, quite frequently, the enlargement of our plant, but in view of difficulties, chiefly relating to machinery, we have not decided on anything as yet.

DEMAND GROWS FOR EFFICIENT TRUCKS

By Four Wheel Drive Auto Company

We have just commenced the erection of our factory here and therefore cannot give you much information as to manufacturing conditions as yet. We might say, that the demand seems to be growing very quickly in Canada as it has grown in the States for a high grade and efficient truck, rather than a cheap made up article, or a small cheaply made truck

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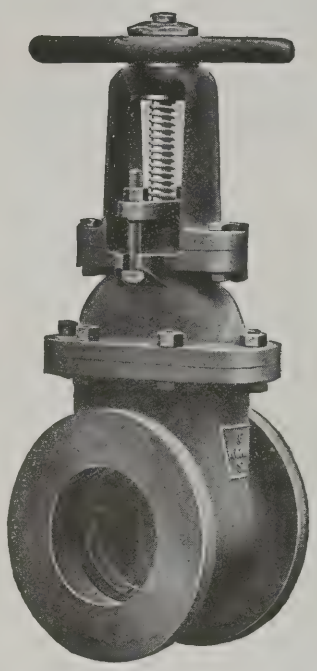
Those who are using Duty Paid Alcohol in their manufacturing processes would do well to consult us with a view to using it "In Bond," thus avoiding the use of two-year-old Alcohol. Under the rules and regulations of the Department of Inland Revenue, newly made Alcohol may be used "In Bond." This Alcohol is much cheaper than two-year-old.

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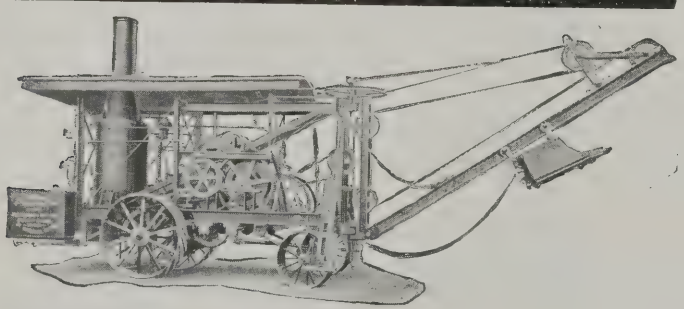
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which will not last very long. Our experience seems to be that even small users of trucks, who have the load to haul, are buying trucks more as an investment than as a temporary make-shift.

Our truck is a high priced article, but prospects look brighter for it than they have ever looked since we have started in Canada. The tendency seems to be for a better built truck, consequently a higher priced truck, and in our particular case on account of the four wheel drive principle the demand is much greater. We expect to need more space next year and are already figuring on an extension to our present premises which are being built.

BRITISH COLUMBIA LUMBER
From Vancouver Province

Over sixty-two million feet of lumber was shipped from mainland mills to foreign ports during 1919. In the preceding year the mills sent out by the sea route a total of over fifty-three million feet. This was thirty-five million better than the total of 1917. So the export lumber business has grown in British Columbia during the past two years.

In 1918, a fleet of fifty-one deep-sea ships took 53,403,089 feet of lumber to points in South America, South Africa, Asia, United States and Europe. Last year, fifty-four deep-sea ships left Vancouver with full or part cargoes of lumber. When it is borne in mind that 154 deep-sea ships sailed outward through the First Narrows during the year, it will be realized that the lumber business has played an important part in Canadian exports from Vancouver. Twenty-eight cargoes have gone from mainland mills to the United Kingdom, with a grand total of 40,381,235 feet. Eleven cargoes have gone to China, totalling 11,879,000 feet. Three ships for Japanese ports carried part cargoes reaching over a million feet.

The trade with South America, South Africa, Australia, Fiji and Siberia fell off, but the United States and the United Kingdom made gains, the latter showing up tremendously. This is due to the big order given last spring. The following table gives a comparative idea of the variations of the market since the end of 1918:

	1919.	1918.
South America	55,000	4,231,000
South Africa	1,000,000	7,000,000
China	11,000,000	18,000,000
Australia	4,470,000	6,000,000
Fiji	.....	500,000
Japan	1,150,000	500,000
United States	3,799,000	2,250,000
United Kingdom	40,381,000	14,000,000
Vladivostock	.....	113,000

As stated before, there were twenty-eight cargoes to the United Kingdom from Vancouver, and eleven to China. The other markets received as follows: Japan, 3; Australia, 7; United States, 3; South Africa, 1; and South America, 1.

The cargo of the s.s. *Admiral Goodrich*, with lumber for San Pedro, is included in the above figures.

The chief exporters have been the Canadian Robert Dollar Company, the Hastings Mill, and the B.C. Timber Exporters. Large quantities of lumber were also shipped from Vancouver Islands mills.

Below are the full figures by markets:

United Kingdom	40,381,235
China	11,879,000
Japan	1,150,000
Australia	4,473,000
United States	3,799,513
South Africa	1,000,000
South America	55,000
	62,737,748

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MONTREAL TORONTO WINNIPEG

Automobile Manufacturers Overcome Difficulties

By H. S. PRITCHARD
Ford Motor Company of Canada, Limited

OUR experience of manufacturing conditions in respect of supply and efficiency of labor has been, that the supply has been adequate for our needs. We regret that efficiency has not always been commensurate with the wage. We believe in this respect, however, we are more fortunately situated than a number of other manufacturers.

Our experience in connection with the supply of raw materials has been that their supply has been extremely erratic. Throughout particularly the last three years of the war, we were practically at all times living from hand to mouth in respect of materials. This was largely due to the feeling on the part of those in control of the distribution of raw materials that the automobile was a luxury, and therefore to be supplied after the manufacture of necessities. As you know, it came down to a point just prior to the armistice, where, after Jan. 1, 1919, the automobile manufacturers of U.S. would have been definitely cut off from any supplies except those necessary to manufacture war materials. We apprehended here that we also would be cut off, as considerable of our raw materials come from the U.S. The armistice, however, intervened, and we obtained a new lease of life. We found, however, stocks of raw materials in such a depleted condition due to the war-time conditions that we were unable to accumulate any stocks throughout the year of 1919, and during that whole year also we were practically working under the same conditions as prior to the armistice. We were forced to pay great deal higher prices, and to, in numerous instances, get these supplies in by express in order to keep our men working.

This was the condition existing at the time of the steel strike, and this strike aggravated the condition. We were able to obtain little or no steel from the U.S. We bought here, there and everywhere, and had men out all over the country buying and chasing it into our factory. The steel strike in reality was not concluded but simply petered out, and we were beginning to get some material in when the coal strike intervened and the situation looked hopeless, in that the steel manufacturers were not able to recommence operations.

It came to a point where we were simply operating from day to day. Particularly was this true just before Christmas-time, when we were trying to keep our men employed over the holidays. We have, however, kept our factory going throughout all these vicissitudes—not at all times at maximum, but we feel we have surmounted the worst of these crises, and that in the future the situation must improve.

As to the quality of raw material, it has been the experience of our factory, that the quality of this material generally has been far inferior. Parts of the Ford car, which have hardly ever been known to break, have broken owing to inferior materials, although these parts have been treated as carefully as formerly. Material also has been of such varying grades, weights, sizes, etc., as to make machine work very difficult. Especially has this been true of the iron used in cylinders, which has been so hard as to cause us immense difficulty.

All parts of the Ford car, with the exception of parts to the value of about $24.66, which are not purchasable in

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Canada, are manufactured within Canada. All of these are not manufactured within our own plant. We have developed to a greater extent, the manufacturing of parts in our plant, taking over during the year under our own control the stamping plant of the Dominion Stamping and Forging Company of Walkerville, and now make our own stampings, such as frames and fenders. We have also taken on during the year the manufacture of electric-starting and lighting equipment for the Ford car—this being manufactured within our own plant. It is our policy to develop manufacturing within our own plant progressively and as quickly as space and conditions will permit. At the present time, our activities are limited by the housing conditions in this community.

We have not been able to increase our daily production during the past year. We did, however, convert a few more of the parts that we manufacture in our factory into cars. In the calendar year, 1918 we manufactured cars and trucks to the extent of 42,838. In the calendar year of 1919, we manufactured cars and trucks to the extent of 45,246.

The demand for Ford cars has increased during the calendar year just past. At no time during the past three years have we been able to manufacture enough cars in any given year to fill the demand. Of course, there may be certain seasons of the year when our manufacture is ahead of the demand, but in the winter dealers are placing cars in storage against the demand which will exist in the spring and summer months. At the conclusion of the year, however, we could always have sold a great many more cars than we were able to manufacture. This condition was somewhat more marked last year than the year previous.

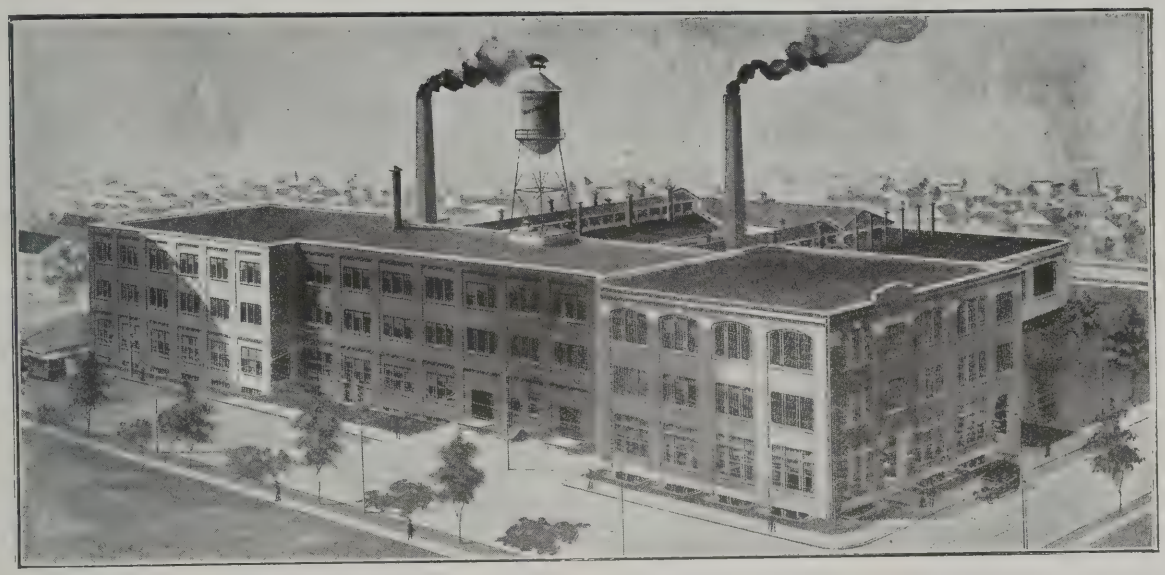
The style of car in request varies with localities. Our standard five-passenger touring car is the most popular car that we have, in that it appeals to the need of the greatest number. We notice, however, an increased tendency to buy closed cars, namely, our Sedan and Coupe model, particularly the Sedan model, which might be referred to as the closed five-passenger car.

In respect to price tendencies, the tendency on the part of the manufacturer has been for an increase in price. During the year, however, the price of all of our product did not change, although prices of raw material advanced considerably during the year, as did the exchange on Canadian funds.

On the part of the purchasing public, there is a tendency to be more liberal. Apparently the circumstances of the average buyer, particularly the farmer buyer in Ontario, Quebec, Maritime Provinces, and Manitoba, were so free, that price cut no great figure with them in the purchasing, as long as they got what they wanted.

Export business has been a considerable factor with us. Our export business is increasing. During our fiscal year from August 1st, 1918, to July 31st, 1919, we could easily have sold double the number of cars in export territory that we had allotted out of our production to our export territory. This allotment is over 22,000 cars, and we could very easily have sold over 40,000 out of a total anticipated production of 60,000 for the entire year.

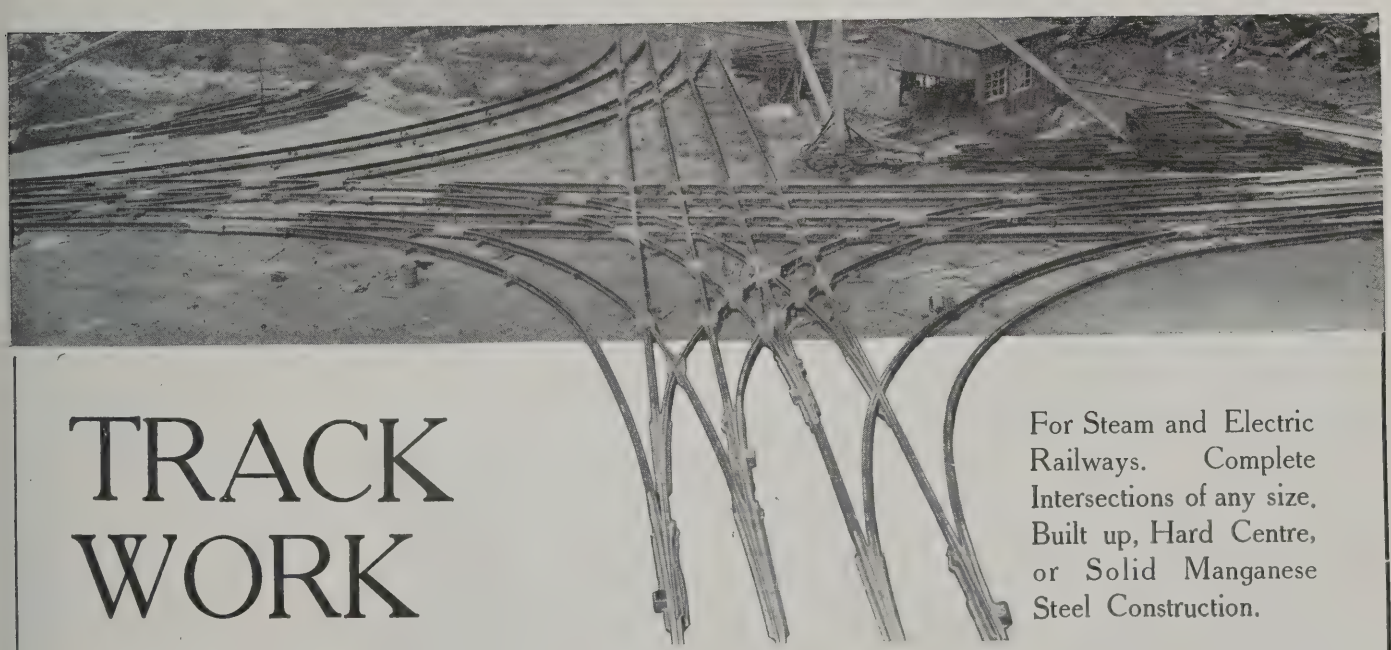
Our size-up of the outlook is, that the domestic demand will not only keep up, but will increase during the coming calendar year. In Eastern Canada there is agricultural prosperity generally. In Manitoba there is also this agricultural prosperity. Certain portions of Saskatchewan and Alberta are prosperous. These two provinces, however, are populated by such optimists that they are already anticipating crops that they will get during the coming season. They have had plentiful and beneficial fall rains, and their winter season has been such as to lead them to believe that their crop will be a successful one. British Columbia, in a car sense, is extremely prosperous.





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CANADA'S INDUSTRIAL EXPANSION

Continued from Page 68c

Big New Plant Proposed

Canadian National Carbon Co., Limited, and Prest-O-Lite Co. of Canada, Limited, Act Jointly

One of the most interesting developments of the day is the proposal of the Canadian National Carbon Co., Limited, and the Prest-O-Lite Co. of Canada, Limited, to proceed at once with the erection of a large new manufacturing plant in Toronto. These companies have jointly purchased the westerly ten acres of the property at the south-west corner of Bathurst St. and Davenport Road in Toronto, and will build on this site two factories—one 80 x 400 feet, two storeys high, with a section 80 x 80 feet three storeys high, and the other 80 x 400 feet, two storeys high. The former will be occupied by the Canadian National Carbon Co., Limited, and the latter by the Prest-O-Lite Co. of Canada, Limited. A heating plant will be housed in a separate structure, 50 x 60 feet, and will have room for installation of additional boilers for future units to be added.

All the buildings will be of reinforced concrete frame, flat slab floors, mushroom type columns on twenty-foot centres, steel sash and brick curtain walls. Each building will have two freight elevators and all toilet accommodations and stairways will be contained in towers erected on outside of buildings, thereby removing any obstructions which might interfere with manufacturing operations.

Arrangement is provided for special rest rooms for female employees; shower baths, a dispensary with competent medical attendant to look after any injuries to employees; restaurant with modern equipped kitchen, in charge of a competent chef, where meals will be cooked and served to employees at bare cost. In fact, both companies propose to make the new plant a model of safety, convenience and utility for not only the owners but for its employees.

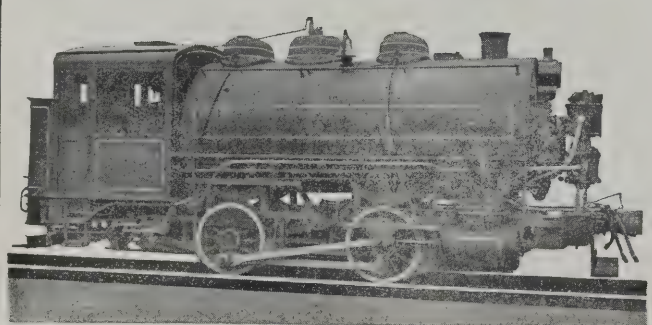
It is expected that the plant will be ready for occupancy in May, 1920, and everything possible will be done to get it ready by that time.

At the present time the two companies are operating five plants at different locations in Toronto, but owing to the large demand for their goods, have been unable to fill orders for some time past and propose now to get facilities which will enable them to take proper care of their customers.

R. H. Combs, who has been general manager of the Prest-O-Lite Company for the past three years, and who was also recently appointed general manager of the Canadian National Carbon Company, states that his companies expect to employ about five hundred people as soon as the new plant is ready to operate, and that the facilities provided by these first two units will take care of upwards of 700 employees if needed. "We have secured enough ground," says Mr. Combs, "to enable us to put up six such units as the two which are now being built, but before adding new units, both the present units will have a third storey added, as the buildings are being erected to carry three full floors."

In addition to the large plant described above, Mr. Combs states that the company will erect in the spring, a new ace-

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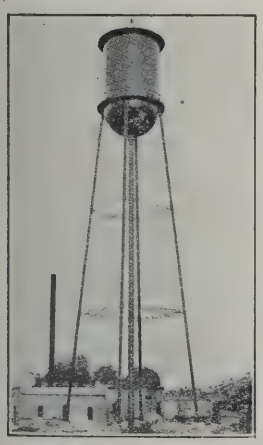
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tylene gas plant in Toronto or immediate vicinity, to take care of the greatly increased demand for compressed Prest-O-Lite gas for welding and cutting, and that a large new storage battery warehouse and assembly plant will be erected at Winnipeg.

The contract for the new plants has been awarded to Wells & Gray, Limited, Toronto, and the company have specified Canadian-made cement, reinforcing rods, brick, sash, boilers, elevators, electrical equipment of all kinds, machinery materials and equipment. The company certainly deserve credit for their determination to provide work for Canadians and to practise the made-in-Canada doctrine.

Ink Company Expands

Reliance Ink Co., Limited, of Winnipeg, Extends Scope of Its Manufacturing Program

Notice is given in the *Manitoba Gazette* that the authorized capital stock of the Reliance Ink Co., Limited, Winnipeg, has been increased from $20,000 to $40,000. This has been done in order to finance certain plant extensions, etc. An addition to their factory has been built, which gives two and one-half times the former space. The company are also extending the scope of their manufacturing facilities particularly along the line of adhesives in bulk, such as envelope gum for envelope manufacturers, label paste for bottlers and padding glue for the printing and bookbinding trades.

Enlarging Four Breweries

National Breweries, Limited, Montreal, Will Spend Large Sum on Plant Extension

Four of their nine breweries are being extended by the National Breweries Limited, of Montreal, three in Montreal and one in Quebec. The capacity of each will be more than doubled at an expense of approximately $17,500,000. Owing to the unsettled conditions in the brewing industry during the last five or six years, nothing had been done in this direction, the only effort made being to keep plants in up-to-date condition without enlargement. When the present building programme is complete, the company will have four of the most modern and efficient brewery plants possible and will be in a position to handle any business offered.

Important British Connections

The Bawden Machine Co., Limited, to Manufacture Products of Several English and Scotch Firms

One of the most important developments of late in Canadian industry is the announcement that the Bawden Machine Co., Limited, Toronto, had entered into arrangements for the manufacture and sale in Canada of the products of the following English and Scotch firms: Alley & McLellan, Ltd., Glasgow, Scotland; Robey and Co., Limited, Lincoln, Eng.; John Thompson, Limited, Wolverhampton, Eng.; David Bridge & Co., Limited, Castleton, Manchester, Eng.; E. S. Hindley & Co., Limited, Bourton, Dorsetshire, Eng.; Brown Bros., Limited, Edinburgh, Scotland; and Bow, MacLachlan, Limited, Paisley, Scotland.

These companies are supplying the Bawden Machine Company with complete drawings of all their lines, together with engineering data, so that in case of breakage on any machines which have been or will be imported into Canada the Bawden Machine Company will be able to manufacture the needed repair parts without delay.

Alley & McLellan, Limited, manufacture air compressors, valves and waterworks supplies, and are already well known in many parts of Canada. Robey & Co., Limited, make a line of semi-Diesel oil engines, which should meet with good de-



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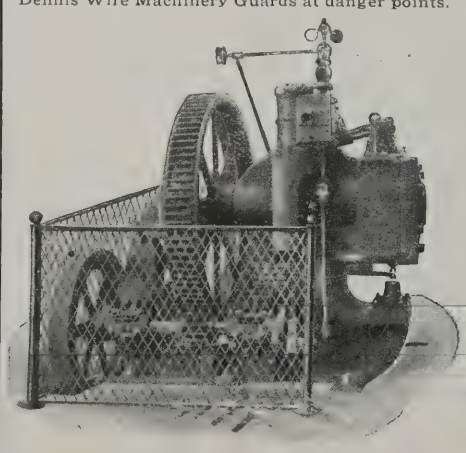
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mand in Canada; and also manufacture steam engines and air compressors and mining machinery.

The Thompson water-tube boiler is new to this country, but has been sold widely in Great Britain, South America, Africa and India, where the company has direct representation. John Thompson, Limited, also manufacture corrugated furnaces. Bridge's friction clutch is known in Canada, as is also this firm's rubber and textile-working machinery, which they have been manufacturing continuously for fifty years.

Brown Bros., and Bow, MacLachlan, Limited, are manufacturers of telemotors, steering gears and steamboat auxiliary machinery. E. S. Hindley are well-known makers of high-speed steam engines.

More Storage Room

Paint Manufacturers Find it Necessary to Secure More Space for Storage Purposes at Plant

A new warehouse, which will contain about 12,000 square feet of floor space, has been erected by Benjamin Moore & Co., Limited, manufacturers of muresco, paints, colors and varnishes, West Toronto. The erection of this building has been necessitated by the rapid growth of their business. Up to the present they have done practically nothing with regard to export business on account of the extraordinary demand for paints in the home market. However, with the erection of this new building and the installation of new machinery they hope to be able to go after some of the export business now offering.

Soap Manufacturers Expand

Lever Brothers, Limited, Toronto, are Marking a Large Addition to Their Plant

Feeling themselves greatly cramped in their present plant, Lever Brothers, Limited, Toronto, manufacturers of Sunlight, Lifebuoy and other well-known brands of soap, have started the erection of two large new buildings. These are three-storey structures, approximately 140 feet long by 80 feet wide, and they are being erected simply to take care of the ever-increasing demand for the company's products.

Four New Machines

Wayagamack Pulp & Paper Co., Limited, Three Rivers, are Making Preparations to Enlarge Their Capacity

Official announcement is made that the Wayagamack Pulp & Paper Co., Limited, Three Rivers, Que., are proceeding with the installation of four new paper machines. This involves the erection of new buildings to house the machines, and the necessary beating and finishing equipment to go with them. The company are also putting in an additional steam plant. They expect to have the first paper machine ready for operation by July 1st, and the others will be installed as rapidly as possible after that date.

Now Manufacturing Trucks

Eastern Canada Motor Truck Co., Limited, have Started Production at Their Factory in Hull, P.Q.

Eastern Canada Motor Truck Co, Limited, have just completed their factory building in Hull, Que., and expect to have their first trucks ready before the middle of February. The company is entirely Canadian and financed by Canadian capital. The officers are as follows: President, Mr. A. K. MacCarthy; Vice-President and General Manager, Mr. G. Gordon Bell, (D.F.C., Legion of Honor, and Croix de Guerre, late Capt. in the Royal Air Force); Secretary-Treasurer, T. W. MacDowell, (V.C., D.S.O., late Major in the C.E.F.); Sales

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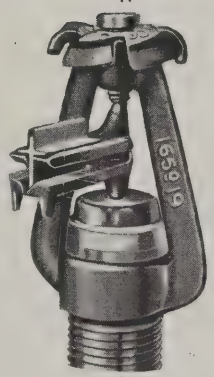
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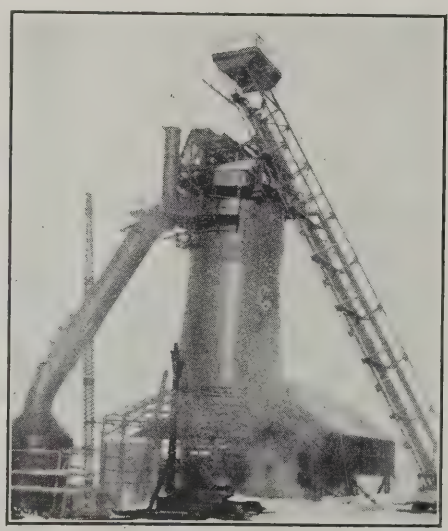
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STINSON-REEB BUILDERS' SUPPLY CO., Limited - MONTREAL

Manager, Mr. J. M. Taylor. The Directors of the Company are: Messrs. T. F. Ahearn (Director Ottawa Electric Railway and Ottawa Car Mfg. Co.); F. E. Bronson (Man. Director the Bronson Co., Ottawa); G. S. MacCarthy, M.D., Ottawa, and Thomas Arnold, Montreal (Pres. Taylor & Arnold, Pres. Manitoba Steel Foundries, Winnipeg, Director Chadburn Telegraph Co. of America, etc.).

The company are specializing for this season on a two-ton model called the Veteran truck, although they are equipped to handle orders for larger sizes. The company's engineers have had years of experience in U. S. truck factories, supplemented by experience in France and Gallipoli with transports where practically every make of truck was represented, and studied under the severest working conditions.

Planning Large Additions

Dominion Oil Cloth and Linoleum Co., Limited, Montreal, Have an Extensive Building Program

Alterations and additions to the plant of the Dominion Oil Cloth & Linoleum Co., Limited, Montreal, will be carried out on a large scale during the coming summer. They will include the construction of a large fireproof warehouse, the remodelling of some of their older buildings to make them fireproof, and to fit them for the most modern machinery, also the erection of new additional buildings to provide for the heavy and valuable machinery required to manufacture linoleum rugs, as well as feltol—their felt base floor covering. Owing to the present world-wide shortage of many of the raw materials used in the business, such as jute canvas, cotton fabrics and linseed oil, the present time seemed the most opportune to carry out their plans. The company's works now comprise a matter of twenty-five different factory buildings, occupying a ground area of about ten acres, and, with the new work completed, the Dominion Oil Cloth & Linoleum Co., Limited, will rank with the largest mills of the kind on the continent, both in modern methods of manufacture as well as in capacity of output.

Moving to Stratford

Gerlach-Barklow Co. of Canada, Limited, to Move Their Plant from Toronto to Building at Stratford

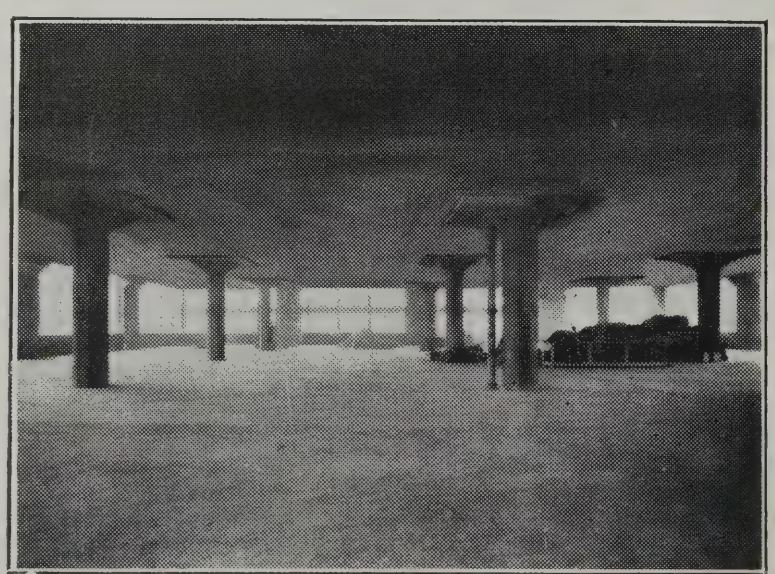
Gerlach-Barklow Co., of Canada, Limited, have recently acquired a factory building in Stratford, Ontario, to which they will move their Canadian plant about the first of April. At the present time the company is housed in the Darling Building, corner Spadina and Adelaide Streets, Toronto, but owing to the congestion in the city they prefer to move to a smaller place. The building which they have acquired is aproximately 40 by 80 feet, three storeys with basement, and is located in an attractive section of Stratford. The company manufacture art calendars and other direct-by mail advertising material, and are employing in their Toronto plant about fifty people.

Enlarging Forge Shop

McKinnon Industries, Limited, St. Catharines, are Making an Extension which will give Increased Capacity

McKinnon Industries, Limited, St. Catharines, have plans made for the erection of an extension to their forge shop. This will be 70 feet long by 50 feet wide, of special construction, consisting of steel frame, continuous steel sash in monitor and along both side walls, steel roll-up curtain doors and two-inch plank roof with tar and gravel. The production from this department will be principally automobile drop forgings, gear forgings and rolled gears.

Hand Your Building Problems to "Sparling Service"



Interior of New Factory of Grahams Limited, Belleville, Ont.

"Sparling Service" shoulders the entire responsibility and by unity of command and concentrated effort your building is completed on schedule time.

"Sparling Service" uses the Richards Patent Truss System in one-story buildings, saving you 20% of the cost of your buildings. This system eliminates 50% of the columns.

Each department of "Sparling Service" is in charge of an expert. The Mechanical Engineering Department being in charge of Mr. C. N. Sparling, who has had 18 years experience in Mechanical Engineering with Bennett & Wright.

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Will cut down your coal bill.

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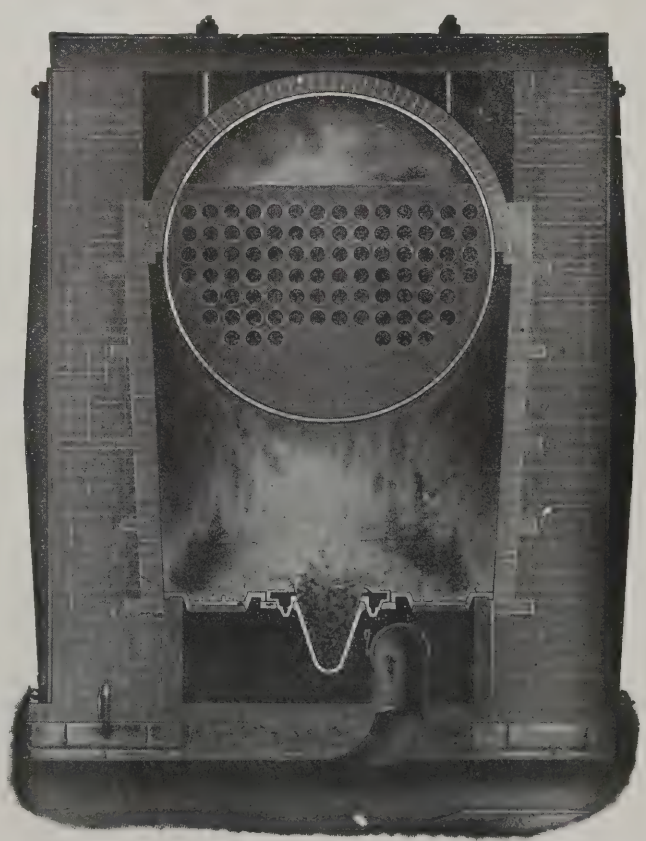
Will maintain a steady steam with fluctuating boiler loads.

Will increase the efficiency and capacity of your boiler plant.

Facts that you can verify should be convincing. We can supply you with such facts. We can refer you to plants—probably in your immediate locality—where the Jones is daily accomplishing fuel savings running between 15 and 25 per cent.

Let us investigate the present conditions in your plant and co-operate with you to attain the above results. More than 150,000 boiler H.P. developed in Canada with Jones Stokers.

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Also Toys, Novelties, Tags and Advertising Signs

Well packed is half sold
Make your containers advertise you

Office and Works:
145 Spadina Avenue

Increasing Their Capacity

Soren Bros., Toronto, Manufacturers of Domestic Tinware, Move to Larger Premises

After spending five years in the building which they erected on King Street West, Toronto, Soren Bros., manufacturers of all sorts of domestic tin and galvanized ware, have been forced to seek larger premises. They have secured property on Van Horne Street, west of Dovercourt Road, and have removed their plant to this site about February 1. One metal building was already on the property and this has been adapted for manufacturing purposes. A second building of brick is being erected by the firm to accommodate office, warehouse and shipping departments, and there is room for a third building which can be erected when required. The new plant contains about 50,000 square feet of space or just double the old plant, and it is hoped to increase the output by 150 to 200 per cent. A galvanizing plant is being installed, which is a new departure for the firm, and they will also have railway siding, which will greatly facilitate the movement of materials and finished products. With their improved facilities, the firm hope to be able to take advantage of export business now offering.

Sawmills Being Improved

Extensive Improvements and Alterations Being Made by Shevlin-Clarke Lumber Co.

Mills of the Shavlin-Clarke Lumber Co., Fort Frances, Ont., are being improved to take care of growing demand for the company's product. The planing mill is being equipped with a number of additional machines; the present engine-room is being removed and additional equipment being installed. No. 1 sawmill is also being improved in its horse-power capacity. The improvements now under way will entail an expenditure of over $100,000.

New Clay Products Company

Manitoba Clays and Building Supplies, Limited, Formed in Winnipeg to Manufacture Clay Products

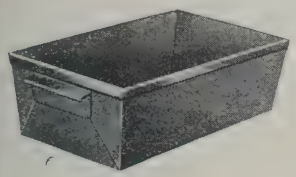
Manitoba Clays and Building Supplies, Limited, is the name of a new $300,000 Dominion incorporation with head office in Winnipeg. The company will operate three departments: (1) manufacture and sale of clay products; (2) sale of building supplies, and (3) construction of roads, culverts, and bridges. The company have in view the operation of at least two plants, the negotiations for which are now pending, and every endeavor is being made to secure them and have them running in time for the heavy demand for brick that will be made this spring. They also hold western agencies for some of the largest firms manufacturing building supplies in the West. The president and managing director is Mr. J. L. Thomas, civil engineer; Joseph Dixon is vice-president, and H. Lewis White, secretary-treasurer. The directors include Messrs. J. L. Thomas, J. Dixon, R. H. Hayward, T. S. Cooke and H. P. Hartley.

Sell Canadian Plant

Norwood Engineering Co. of Canada Dispose of Their Factory at Cowansville, P.Q.

The Norwood Engineering Co., of Canada, Limited, the Canadian branch of the Norwood Engineering Co., of Florence, Mass., have recently disposed of their manufacturing plant at Cowansville, P.Q., to the Colonial Machinery Co., Limited, and have transferred their office to 71A St. James Street, Montreal. The Norwood Co. purchased the Cowansville factory in 1914, with the intention of manufacturing mechanical filtration plants and paper-mill machinery, but owing to the

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OUR SPECIALTY

Heavy Steel Round and Square Tanks. All kinds. Welded throughout. Made to your order and measurements. Any gauge from 20 to ⅜-in. Plate.



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GASOLINE TANKS
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Oil Waste Cans

THE STEEL TROUGH & MACHINE CO., LTD.
Tweed, Ont., Canada

"QUALITY FIRST"



SPECIAL SHEET METAL WORK

Let us figure with you for anything made from Sheet Metal, 16 gauge and lighter

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MANUFACTURERS OF
Metallic Shingles, Siding, Ceiling, Corrugated Iron, Ventilators, Skylights, Garages, Storage Buildings, Special Sheet Metal Work
TORONTO AND WINNIPEG

DOMINION BRIDGE CO., LIMITED

MONTREAL, P.Q.

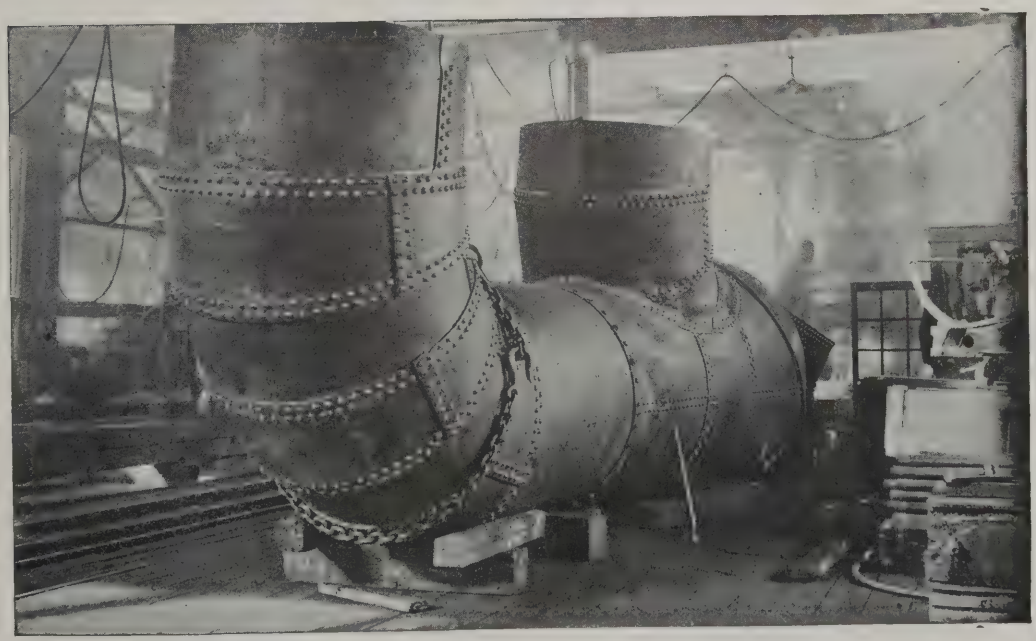
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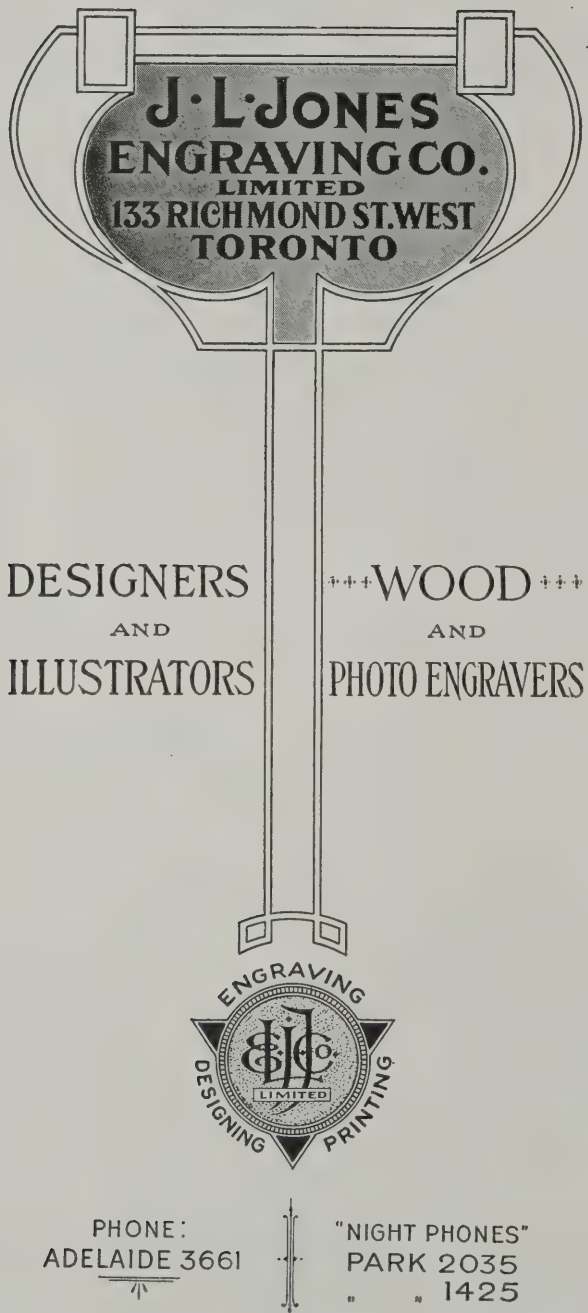
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war, this business was very limited and there was practically no business whatever along these lines being done in Canada. The company accordingly equipped the factory for shell-making, and manufactured shells for the Imperial Munition Board for about three years. At the close of the war, they sold off the shell-making machinery and, as business in their particular line did not seem to develop, they finally decided to sell the factory. In the meantime, they have arranged with the Colonial Machinery Co. to manufacture part of their product for them. They will maintain a selling force in Canada, and if business warrants, will probably resume manufacturing at a later date.

Will Build New Foundry

P. B. Yates Machine Co. Plan Construction of Half-Million Dollar Plant

The P. B. Yates Machine Co. will this spring commence the construction of a half-million dollar iron foundry at Beloit, Wis. The building, which will contain 54,384 square feet of floor space, will be constructed of brick, steel and reinforced concrete, and will contain the latest and most efficient foundry equipment. This addition will double the output of the Beloit plant.

Establish Branch Plant

The Grosch Felt Shoe Co., Limited, Milverton, Takes Over Plant at Stratford

The Grosch Felt Shoe Co., Limited, Milverton, Ont., have acquired the property in Stratford, previously owned by the Stratford Desk Co., and are remodelling and equipping it for the manufacture of their lines of felt shoes and slippers, the plant at Milverton having for some time proved too small for the business offering.

The property consists of main building of solid brick construction, 212 x 40 feet, two storeys high. Adjoining this is a warehouse and boiler and engine-room, and adjacent thereto a brick building two storeys high, 40 x 50 feet, which will be utilized for the manufacture of felt specialties. The property includes 4½ acres of land, giving ample space for expansion.

Operations have not yet commenced, owing to delays in the delivery of machinery, but it is expected that everything will be in running order before March 1. From 75 to 100 hands will be employed at the outset, and 1,000 pairs of shoes turned out daily.

New Industry for Brantford

Canadian Corporation Formed to Manufacture Blue Bird Electrical Appliances in Canada

Under the name of the Blue Bird Manufacturing Co. of Canada, Limited, a company has been formed in Brantford to manufacture in Canada all the electrical household devices now being made by the Blue Bird Manufacturing Co. of St. Louis. The new company has taken over No. 1 plant of Motor Trucks, Limited, and will start manufacturing in the near future. J. B. Detweiler, manager of the Brantford plant of the Steel Co. of Canada, has resigned that position to become president, and also interested in the company are R. E. Secord, W. J. Verity, W. C. Boddy and T. Hendry, all of whom were previously directors of Motor Trucks, Limited.

The principals of the St. Louis company will be financially interested in the Canadian company, but the latter will be controlled and the greater part of the stock be owned by Canadians. The Canadian company obtains the rights for the Blue Bird design and trade mark, also all patents and licenses now in possession of the American company and any that

Fellow Manufacturers



We Make in Canada
Lead Pipe
Sheet Lead
Wire Solder
Bar Solder
Ribbon Solder

BABBITT METALS
for all requirements

INGOT METALS
Copper Tin Lead
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EVERYTHING
IN METALS

Wherever you are
we can serve you

The Canada Metal Co. Limited
TORONTO MONTREAL WINNIPEG VANCOUVER



General Efficiency Demands the Use of

BERNARD
Wood Split Pulleys

The war is ended so far as a continuation of the bloody combats of the battlefields is connected. But in the war after the war there will be waged lively battles for industrial supremacy wherein the advantage will lie with the plant equipped with the most economical and durable machinery.

Competition will be more intense, and in this connection, keep your eye on the overhead. It has been looming large these past few years and must certainly come down.

BERNARD Wood Split Pulleys will help you eliminate power waste; their cost is low, their efficiency is GREAT.

The A. Bernard Industrial Co.
Manufacturers of High-Grade Power Transmission Appliance
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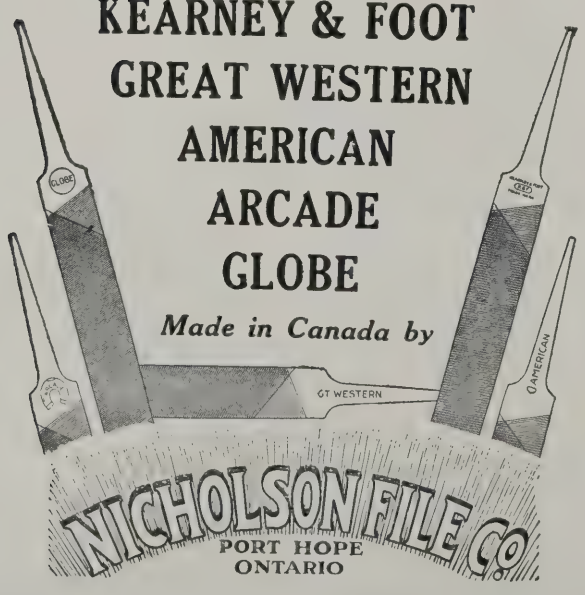
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may be acquired in future. A subsidiary company, the Canadian Blue Bird Appliance Co., will be formed to market all goods made by the Blue Bird Manufacturing Co. The principal products will be electric clothes washing machines and electric iceless refrigerators, and later on dish washer, ironing machines and vacuum cleaners.

Paper Mill for Winnipeg

Red River Paper Mills, Limited, will Undertake Reclamation of Waste Paper on a Large Scale

Within the next month or two, Red River Paper Mills Limited, in which a number of well-known Winnipeg men are interested, will start operations. The company will manufacture new paper from wastepaper which is now being destroyed and burned or disposed of to American mills for remilling. A site for the mill with 350 feet frontage on the Red River has been purchased and this will allow for ample expansion as business develops. Beaters, pulping engines, refiners, and paper machines, are now being installed and all will be driven by electrical power. Mr. Frederick T. Gilroy is manager of the company.

Form Canadian Company

Canadian Mead-Morrison Co., Limited, Will Operate the M. Beatty Plant at Welland

Reference was made in last month's issue of INDUSTRIAL CANADA to the purchase by the Mead-Morrison Co., of East Boston, Mass., of the plant of M. Beatty & Sons, Limited, Welland, Ont. A Canadian company has subsequently been formed,—Canadian Mead-Morrison Co., Limited, with general sales offices in charge of D. W. Coe, general sales manager, at 285 Beaver Hall Hill, Montreal. It is the company's intention to continue the manufacture of the Beatty products as well as to undertake the manufacture of the much more extensive line of Mead-Morrison products. The name "Mead-Morrison" is quite well-known throughout Canada, as the American company has supplied a very large amount of equipment and has built complete plants for the unloading, storing and handling of coal, ore, coke, cement, sand and other materials.

The Tavistock Milling Co., Limited, Tavistock, Ont., intend to increase the capacity of their plant by installing some new machinery.

On December 1, the Canadian Ice Machine Co., Limited, removed their office, shop and warehouse to their new building at Villiers and Munition Streets, Eastern Harbor Terminal, Toronto.

Directors of the United Grain Growers have not yet decided what course they will follow regarding rebuilding of their flour mill at Gladstone, Man., recently destroyed by fire. It will probably be rebuilt of the same capacity as formerly.

The Canada Paint Co., Limited, Montreal, have recently completed the installation of new machinery which will give their plant an increased capacity of at least 25 per cent. They are looking for a record year in the sale of their various products.

As soon as they can obtain the right textile machinery for their work, Henry Davis & Co., Limited, Toronto, manufacturers of infants' and childrens' wear, will increase their

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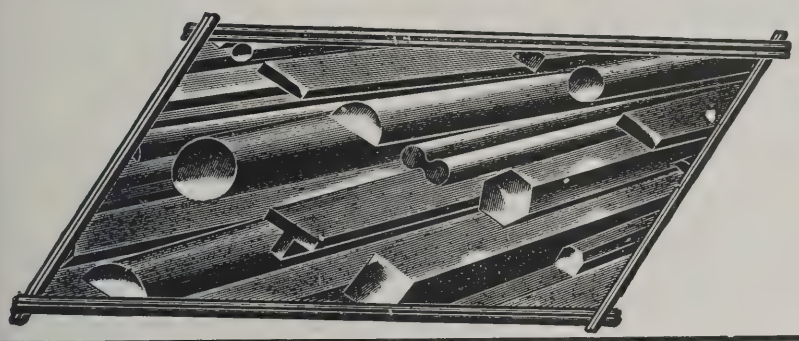
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plant considerably, but it may be some months before they will be able to do so.

A plant for the manufacture of monuments and cut stone for building purposes will be erected by Alex. Young Limited, at Regina. The plant will cost about $30,000, and employment will be given to about 50 men. Details as to size and capacity have not yet been worked out.

The Great West Knitting Co., Limited, Winnipeg, manufacturers of fancy sweaters, jerseys, mitts and bathing suits, have received authority to increase their capital from five to twenty thousand dollars. They have greatly increased the capacity of their plant and hope to at least double their last year's output of goods.

Western Upholstery Limited is the name of a new company which has recently been established in Calgary for the purpose of manufacturing upholstered goods for the trade. They have started in a small way, and have so far met with considerable encouragement. The president is Mr. D. S. Sykes, and the location of the industry is 407a, Eighth Avenue West.

The Beaver Soap Company, of Winnipeg, of which Mr. W. G. Fraser is president, are putting in eight thousand dollars' worth of new machinery into their soap manufacturing plant, for the purpose of doubling the capacity of the plant. The Beaver Soap Company manufacture soap for steam laundry purposes and handle other supplies in connection therewith.

The Procter & Gamble Manufacturing Co., soap manufacturers, Hamilton, are at present erecting a three storey addition, approximately 50 x 100 feet, to the building which houses their Crisco and Flakewhite departments. This building will be used as additional capacity for the manufacture of these products and they expect to have it completed early in the summer.

The Canada Linseed Oil Mills, Limited, Toronto, are putting up a new building, 30 by 40 feet, two storeys and basement, which will be used for office and warehouse purposes. Since building their mill and present office about ten years ago, business has increased to such an extent that additional clerks have been necessary, and in order to provide adequate accommodation for the office staff they are erecting a new building.

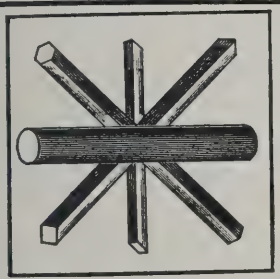
The Colonial Hide Company, dealers in hides, calfskins, pelts, wool and furs, Boston, Mass., who have warehouses in a number of Eastern Canadian cities, have bought the Pion tannery in Quebec. It was at first rumored that they would use it for manufacturing purposes, but the company inform INDUSTRIAL CANADA that they do not expect to do a manufacturing business of any kind. The purchase was made because present quarters were too small.

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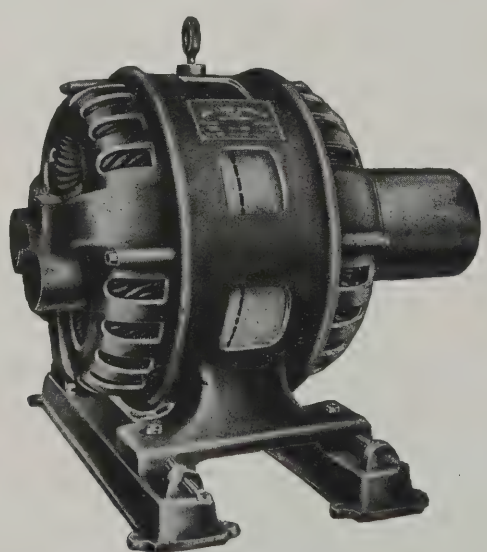
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REPAIR

British Export Information

Association Receives Four Volumes of Valuable Compilation on British Manufactures

The head office of the Canadian Manufacturers' Association has recently received the following volumes of the "British Standard Exporter, 1919-1921"—

Vol. I, Leather, Earthenware and Hardware, 485 pages.
Vol. II, Groceries, Provisions, Wines and Tobacco, 540 pages.
Vol. III, Stationery and Fancy Goods, 525 pages.
Vol. IV, Engines, Boilers and Commercial Vehicles, 658 pages.

Each volume is divided into sections, and contains not only the names of British manufacturers and their products, but also illustrations, descriptions and in many cases, the prices of the articles. The volume dealing with stationery and fancy goods includes many samples.

This publication, which, when completed, will include 25 volumes represents a serious attempt on the part of British manufacturers to furnish the overseas markets with information of an adequate description respecting sources of supply in the United Kingdom. The production of the publication has involved an outlay of a quarter of a million pounds, and includes the products of over 4,500 British manufacturing firms.

At the present time these volumes should be of inestimable value to Canadian firms who are looking for sources of supply in the United Kingdom.

Propose Plant Councils

Spanish River Pulp and Paper Mills Will Hold Conference on February 16

At the "President's Banquet," held at the Soo on January 10th, several announcements of interest to employees of the Spanish River Pulp and Paper Mills were made by Col. C. H. L. Jones, the general manager. Of most importance was the intimation that the question of establishing plant councils had been taken up, and that a general conference would be held to discuss the proposal on February 16. Col. Jones also announced that it was the intention to insure all men in the employ of the company against death, sickness, and accident, to institute a system of service buttons, and to provide vacation at full pay based on length of service. The "President's Banquet," at which these announcements were made, was attended by men from all the company's mills, and was a most successful affair from the standpoint of bringing the management and the men into closer touch

New Patents

Several Interesting Devices for which Patents Have Recently Been Issued

The following is a list of Canadian patents recently issued through the agency of Messrs. Ridout and Maybee, 156 Yonge Street, Toronto:—

Emile A. Fourneaux, the production of black upon textile fabrics; Alfred A. Lockwood, obtaining copper from its ores; John W. Myatt, loose leaf books or binders; Auguste J. Rossi and C. J. E. Schroeder, paints; Louis E. Barton, composite titanic oxide pigments and methods of producing the same. Henry C. Minns testing device for the ignition systems of internal combustion motors; Fred D. S. Robertson process of extracting potassium from its insoluble compounds;



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John Russell button-hole stitching machine; Predigest Foo Co. Limited manufacture of animal feeds from kitche garbage and the like; Alfred T. Kwajel magneto-electri machines for engine ignition purposes; John Yetton and W E. Brockett holders for wire staple belt fasteners; Philip T Jackson fluid control apparatus.

Leather Manufacturer's Death

President Collis Leather Co., Limited, Aurora, in Tannin Industry All His Life

A distinct loss to the ranks of Canadian leather manufa turers was occasioned by the death on January 28 of Mr Sydney M. Collis, president and general manager of th Collis Leather Co., Limited, Aurora. Mr. Collis was an Eng lishman by birth, and had been in the tanning industry al his life. To him and his brother, the late Walter Collis credit is given for the introduction into Canada of the chrome process of tanning calfskins. The late Mr. Collis was in his 63rd year.

Resigns Management

F. R. Humpage Leaves the Wilt Twist Drill Co. o Canada, Limited, Walkerville

Effective March 31 next, Mr. F. R. Humpage has resigned the offices of vice-president and general manager of the Wilt Twist Drill Co., of Canada, Limited, Walkerville. Mr. Humpage has been in ill-health for some time and felt it necessary to give up for a time all business activities. He left at the end of January for Florida where he will endeavor to secure a complete restoration of health.

Mr. Humpage has been connected with the Wilt Twist Drill Co., of Canada for three years and a half during which period he was successful in more than trebling the output and sales of the factory, besides adding several new lines such as reamers and milling cutters. Mr. Humpage has always taken an active interest in all matters pertaining to manufacturing in Canada and has been instrumental in endeavoring to raise the standard of the drill, reamer and cutter manufacturing industries in Canada.

Pioneer Instrument Manufacturer

Late Eri Whaley, of Toronto, Said to Have Made First Cornet Produced in Canada

The late Eri Whaley, president and general manager Whaley, Royce and Co., Limited, Toronto, whose death occurred on January 28, was a pioneer in the manufacture of band instruments in Canada. Starting business life in the carriage manufacturing industry in Orangeville, he came to Toronto in 1885 and became associated with Thomas Claxton in the music trade. In 1888 he formed a partnership with George C. Royce as Whaley, Royce and Co., beginning the manufacture of brass band instruments. That year they completed the first cornet ever made in Canada. In 1890 the company engraved the first music plate made in Canada, following this up with the production of the first Canadian-made clarionets, flutes, and piccolos. In 1901 Mr. Whaley bought out Mr. Royce and became president and general manager of the company, which was then incorporated.



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Catalogues and Booklets

Hoists and Conveyors

Two new catalogues, issued by the Canadian Link-Belt Co., have recently come to hand—No. 375, dealing with "Labor Saving Elevators and Conveyors," and No. 380, with "Electric Hoists and Overhead Cranes." As usual with all the advertising matter issued by this company, the utmost care has been taken to visualize the appliances described, and a series of photographs illustrating the conveyors, hoists, etc., forms a distinctive feature of each book. All these photographs have evidently been taken and reproduced by experts, for they are remarkably clear and convincing. The pictures really tell the whole story, and letter-press is reduced to a minimum. Manufacturers, who have handling problems of any kind to solve, would do well to secure copies of these books, from which they will undoubtedly get useful suggestions.

C.C.M. Bicycles

The Canada Cycle & Motor Co., Limited, have issued an export edition of their catalogue, in which they tell something of their organization, their factory and their product. It is tastefully gotten up and contains numerous illustrations, which serve to visualize the attractive qualities of their bicycles.

A Neat Diary

A neat little leather-bound pocket-size diary for 1920 has been issued by the Canadian Westinghouse Co., Limited. In addition to the ordinary diary features, the little volume contains 48 pages of useful information principally along the lines of engineering data, which will be found of value by engineers. The diary will be appreciated by all who have use for such a handy compendium.

Methods of Figuring Radiation

A new bulletin, "Dunham Heating Data," has just been issued, describing and explaining standard methods of figuring radiation and laying out piping. Valuable ventilating data is also included, the whole being put in very practical and concise form, getting at the real information without having to wade through a lot of preliminaries. Various details of piping connections are illustrated, and complete pipe sizing information given. This bulletin, together with several others of interest and value to the stationary and heating engineer, can be secured by writing the C. A. Dunham Co., Ltd., 1535 Davenport Road, Toronto, Ontario.

Saws and Saw Tools

E. C. Atkins & Co., manufacturers of Silver Steel saws and saw tools, have just issued a large and comprehensive catalogue of 264 pages, which they send out in ordinary cloth binding and also in special ooze leather binding with sunburst cover. The work of arrangement, classification and illustration has been most effectively done and from the typographical standpoint the volume is a real work of art. Every item is realistically illustrated; the descriptive matter is most complete and by means of a carefully prepared index it is possible to get at desired information without loss of time. It is in short a catalogue that will be most useful to all buyers of the kind of products manufactured by E. C. Atkins & Co.

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Book Reviews

The Fuel Problem

Industrial Fuels. By J. Stephenson. Toronto: The Westman Press, Limited. Paper covers, $2.25. Cloth covers, $3.00.

The appearance of this work by Mr. Stephenson merits a special word of commendation. It marks an attempt to provide Canadian readers with technical information written from the Canadian viewpoint and dealing specifically with Canadian problems. Almost invariably in seeking information on technical themes, one must have recourse to textbooks compiled in Great Britian or the United States, and, while these are often very admirable works, they lack the application to Canadian conditions which would render them of maximum value. In the present volume, which has not only been written in Canada, but also printed and published here, these deficiencies are remedied.

Mr. Stephenson has gone into his subject very thoroughly and systematically. His ten chapters deal successively with coal, natural gas, coal gas, oil gases, producer gases, coke, fuel briquets, application of commercial gases, fuel analysis and fuels of the future. In each case he goes back to the beginning, and traces developments down to the present day, explaining and illustrating processes and appliances and weighing the relative merits of various fuels. At the present time when the fuel problem has become such a serious one, and attention is being increasingly directed towards its solution, the publication of such a book is timely and valuable and an examination of its contents should prove of service to all manufacturers.

Advice for Women Workers

The Girl of the New Day. By E. M. Knox, Principal of Havergal College, Toronto. McClelland & Stewart.

The insight and experience gained from dealing with successive generations of girls, numbering at the present time over five hundred, in the three Toronto schools under her care, give Miss Knox an unusual opportunity for studying the "Girl of the New Day" and her needs for to-day and to-morrow. In this volume much wise and kindly advice is bestowed on the young women who are just leaving school to take their place in the world of action. The author takes up the various lines of work now open to women, and deals with the special features of each. She has chapters on "The Business World" and "Salesmanship," in which she refers to these new spheres of endeavor, pointing out their advantages and drawbacks. Throughout she endeavors to inspire a desire to do work worth while, and not to be content simply to drift. It is a book of inspiration and should be of real help to many a young woman on the threshold of active life.

A New Business Publication

An interesting newcomer in the field of Canadian business publications is *Business Methods*, a monthly magazine, the first number of which was issued in December. Modelled somewhat on the lines of *System*, it aims to specialize in Canadian experience in business management, and for this reason has a special claim on the attention of Canadian business men. The initial number is a creditable production, well illustrated and gotten up in a pleasing typographical form. Among its contents one notes an interesting illustrated description of welfare work at the Massey-Harris works in Toronto, and such informing articles as "Points to know about your Fire Insurance Policy," "The Better Business Letter," "How much do you set aside for Depreciation?" "Problems of Filing Correspondence," etc. If the standard of the first number is maintained, this publication should have an assured position in the favor of Canadian readers.

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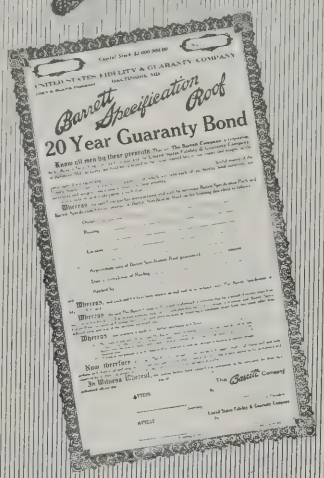
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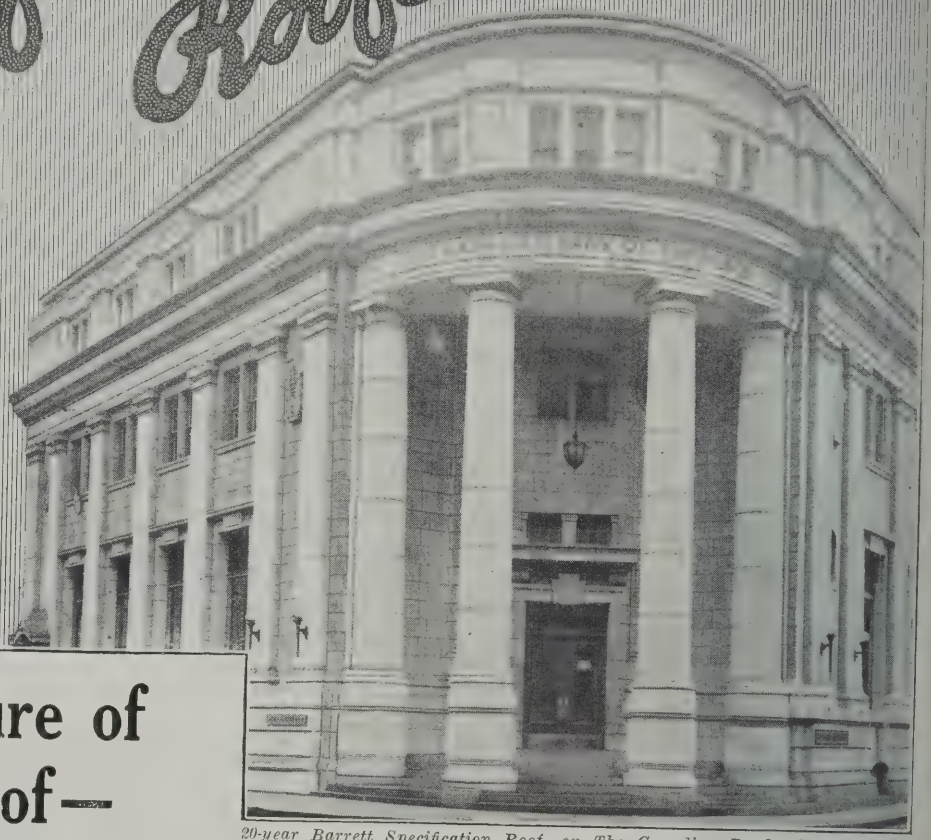
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The Canadian Manufacturers Association
INCORPORATED

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Editorial Comment

Made-in-Canada Goods

THE employment of architects and engineers who are citizens of other countries on building and contracting in Canada, tends to diminish the amount of Canadian-made goods used in construction. When a foreign architect is employed to design a building, he naturally specifies those goods with which he is most familiar, and, consequently, his specifications too often require or recommend the use of material which is not made in this country. In the letting of contracts, Canadian architects and engineers should be retained. There is a glamour about the prophet from the far country which tends to blind us to the merits of our own countrymen. We have very good architects and engineers in Canada, and those who are not quite up to standard through lack of experience, will never improve unless they are allowed to acquire experience. During the last five years, Canadians have shown what they can do when they get the opportunity and when responsibility is placed upon them.

When Canadian architects or engineers are employed on contracts, they incline to specify that Canadian-made material shall be used, if for no other reason than that they are more familiar as a rule with Canadian material than with material made in other countries.

It is idle for Canadian manufacturers to preach the made-in-Canada doctrine unless they practise it.

Farmers and Chambers of Commerce

WITH class movements so prevalent at the present time, especially among the farmers of the Dominion, it is rather an encouraging sign to find that agriculturists in the neighborhood of Guelph, Ont., are joining the Chamber of Commerce of that progressive industrial centre. This is a movement that should be cordially welcomed, both from the standpoint of the business man in the city and the dweller in the rural districts. The association of the two parties in the one organization, formed for the advancement of the entire community, will do much to break down prejudices and establish a hearty spirit of co-operation. The manufacturers of Guelph, coming in personal contact with the neighboring farmers, will be able to take a more sympathetic interest in the problems with which the agricultural industry is concerned, while on the other hand the farmers will unquestionably be disabused of many of the erroneous ideas which they have been holding regarding the operation of manufacturing enterprises. It is from all points of view a desirable step to take to enroll the farmers in our boards of trade and chambers of commerce and to have them feel that they form an important and responsible part of the business community.

Increase in Freight Rates

ON the return of the United States railroads on March 1st there is every indication that an advance in rates will be requested, but it is rather difficult to say exactly how much this will be. Various amounts have been mentioned, ranging from 20 per cent. to 40 per cent., but it is important to note that the new Bill, which will return the roads to private owners, directs the Interstate Commerce Commission in regard to this very question, and goes so far as to provide the amount of return which shall be given for two years from the 1st of March. This being the case, it would seem to be rather difficult for any horizontal increase in rates to become effective. It would appear rather that the rates would have to be re-aligned and this is, of course, quite a large order and would take considerable time.

In Canada we have heard remarks by President Beatty, of the Canadian Pacific Railway, and President Hanna, of the Canadian National Railways, as well as various press despatches coming from Ottawa, referring to an increase in freight rates in Canada about the same time as that in the United States, and the amount has been stated variously from 25 per cent. to 40 per cent.

There are many things, of course, which must be considered in regard to the Canadian National Railways as a whole. It has been stated that the Canadian National Railways have a very large deficit and that it must be met

by an increase in freight rates. It might be well to learn definitely what caused this deficit. It is true that there have been increases in costs of materials used by the railway companies and enormous increases in the wages paid their employees, but the question is, how much of the deficit of the Canadian National Railways is represented by these increases?

The question is a large one and every manufacturer and other shipper in the country should study this matter very carefully. The Transportation Department of the Association would be glad to have the views of any manufacturers (members of the Association), in regard to this important situation. It is urged that the matter should be studied, and studied carefully.

The Question of Customs Appraisements

WHEN sterling in New York is at $3.69 the tariff of Canada against British goods is practically eliminated; and only the enormous world demand for the products of United Kingdom factories, under conditions which clearly are temporary, prevents the flooding of our markets with shipments of goods from the United Kingdom. Evidence of this fact is found in the imports from the United Kingdom for January, 1920, which exceeded in value all such importations in any previous month of our history. As sterling falls in New York the conditions are accentuated. And if the value of sterling were determined for duty purposes by the exchange rate, customs duty would be collected on lower values than the fair market value of the goods as sold for "home" consumption in the United Kingdom. This would be contrary to the Customs Act of Canada; but if the concession could be, and were, granted, the loss in customs revenue would be very great. Moreover, it cannot be contended that transactions for "home" consumption in the United Kingdom are appreciated in price to the extent or in correspondence with the depreciated value of sterling in Montreal. This can be realized at once by consideration of our own condition for transactions in general for "home" consumption in Canada are not appreciated in price to the extent or in correspondence with the depreciated value of the Canadian dollar in the United States. The basis of sterling, the franc and the lira, still is gold, and it is to the interests of Canadian importers that there should be a settled basis for the valuation of imported European goods. If the rate of exchange were to be allowed in calculating the value for duty, it is probable that no two importers of the same goods would pay the same amount of customs duties. Thus, there would be all sorts of invidious discriminations.

The action of the Customs Departments of Canada in placing the same par valuation on sterling exchange which the United Kingdom attaches thereto in respect to sales for "home" consumption in that country, does not destroy, as some erroneously contend, the effect of the British Preferential Tariff of Canada. Examples of actual transactions will make this clear. With sterling in New York worth $3.69, the Canadian dollar in New York being at a discount of 13½ per cent., the value of the pound sterling in Montreal is $4.18. On this basis the customs duties, and laid down cost in Canada, on a direct importation from the United Kingdom into Montreal, as compared with a like shipment into the United States and reshipment thence to Canada, would be as follows:—

From United Kingdom Direct to Montreal.

1,500 lbs. tissue paper, £200; par value, $973.00.		
Duty at 15%, British Preferential Tariff, on the par value of the pound	$145 95	
Freight and insurance, say	7 00	
Actual cost in Canadian money, with sterling at $4.18	836 00	
		$988 95

From United Kingdom into United States and Reshipped thence to Canada.

1,500 lbs. tissue paper, £200; converted at $3.69	$738 00	
United States duty at 30%	221 40	
New York brokerage or commission, say	45 00	
Freight and insurance, say	7 00	
	$1,011 40	
If reshipped to Canada, ex U.S. Customs Bond, the General Tariff Rate would have to be levied on this sum of $1,011.40.		
Canadian duty on $1,011.40 at 25%, plus 7½% War Tariff	$328 57	
Dumping duty	151 65	
Freight, New York to Montreal, say ...	7 00	
Exchange, 13½% on $790.00	106 65	
Laid down cost in Canada		1,383 87
Difference in favor of making direct importation from United Kingdom to Montreal		$394 92

ANOTHER CASE.

From United Kingdom Direct to Montreal.

1,000 yds. woollen cloth at £1 per yd.; par, $4,860.00.		
Duty at 30%, British Preferential, on the par value of the pound	$1,458 00	
Actual cost in Canadian money, with sterling at $4.18	4,180 00	
Freight, insurance, etc., say	100 00	
		$5,730 00

From United Kingdom into U.S. and Reshipped thence into Canada.

1,000 yds. woollen cloth at £1 per yard; converted at $3.69	$3,690 00	
United States duty, 35%	1,291 50	
New York brokerage or commission, say, 5%	184 50	
Freight, insurance, etc., to New York ..	100 00	
Duty paid, fair market value in New York	$5,266 00	
If reshipped to Canada, ex U.S. Customs Bond, the General Tariff Rate would have to be levied on the sum of $5,266.00.		
Canadian duty on $5,266.00 at 35%	$1,843 10	
Dumping duty, 15%	779 90	
Exchange, 13½% on $3,974.00	536 51	
Freight, New York to Montreal, say ...	100 00	
Laid down cost in Canada		7,234 01
Difference in favor of making direct importation from United Kingdom to Montreal		$1,504 01

ANOTHER CASE.

From United Kingdom Direct to Montreal.		
20,000 yds. unbleached cotton fabric at 1 shilling per yd., £1,000, or (par) $4,860.00.		
Duty at British Preferential Rate, 15%.	$729 00	
Actual cost in Canadian money, with sterling at $4.18	4,180 00	
Freight, insurance, etc., say	100 00	
		$5,009 00
From United Kingdom into U.S. and Re-shipped thence to Canada.		
20,000 yds., unbleached cotton fabric, £1,000; converted at $3.69	$3,690 00	
United States duty at 20%	738 00	
New York brokerage or commission, say 5%	184 50	
Freight, insurance, etc., to New York	100 00	
Duty paid, fair value in New York	$4,712 50	
If reshipped to Canada, ex U.S. Customs Bond, the General Tariff Rate would have to be levied on the sum of $4,712.50	$4,712 50	
Canadian duty at 25% on $4,712.50	1,178 00	
Dumping duty	706 80	
Exchange at 13½%	536 49	
Freight, New York to Montreal, say	100 00	
Laid down cost in Canada		6,495 79
Difference in favor of making direct importation from United Kingdom to Montreal		$1,486 79

The Canadian Customs appraisement of importations from the United Kingdom according to par value of sterling cannot be evaded by shipment of such British goods into the United States and reshipment thence into Canada. If any overseas goods are shipped into the United States and subsequently reshipped into Canada, the Canadian Customs, under the law as it stands, has to appraise such goods according to the duty paid, open market, usual home selling price for consumption in the United States. Thus, the cost of goods from the United Kingdom, plus carriage, insurance and other charges into the United States, including the United States duty and the profit which would accrue if sales were made in the United States, have all to be added together to arrive at the value for duty of such shipments from the United States into Canada. Also, such importations into the United States have to be entered at the general tariff rate instead of British Preferential Tariff rate. The result is that British goods cannot be shipped into the United States and re-shipped into Canada except at a loss when compared with the laid down cost of like goods shipped direct from the United Kingdom into Canada. The provision in the Custom law of Canada referred to in the foregoing is Section 50, as follows:—

"The Governor in Council may provide that in the cases and on the conditions to be mentioned in the Order in Council goods *bona fide* exported to Canada from any country, but passing in transitu through another country, shall be valued for duty as if they were imported directly from such first mentioned country; provided that goods which have been entered for consumption or for warehouse, or which have been permitted to remain unclaimed, or which have been permitted to remain for any purpose, in any country intermediate between the country of export and Canada, shall not be considered as in transitu through such intermediate country, but shall be treated as goods imported from such intermediate country and be valued and rated for duty accordingly."

The regulations founded on this Section appear in Customs Memorandum No. 1097-B.

If the depreciation in sterling were to be allowed for Customs duty purposes, the same principle would have to apply to importations into Canada from the allied countries and also to importations from late enemy countries. Thus, a change from the present Customs requirements, to an allowance for exchange conditions, would promote sales in this country from late enemy countries, more than from any other country.

The German mark has a par value in Germany of 23.8 cents, but is worth about one cent in Canadian money. Allowing exchange as outlined would result in an article which sells in Germany for 1,000 marks ($238) being appraised by the Canadian Customs at one cent per mark, of $10. A case in point: One grade of German lead pencils were sold for export before the war at 26 marks per gross (equal to $6.18 in Canadian money). Within recent weeks they have been offered at the same price of 26 marks to Canadian merchants. If exchange were allowed, these pencils, if imported now, would have to be appraised by the Customs at about 26 cents per gross instead of $6.18; but 26 cents would scarcely buy the graphite used in their manufacture.

On the foregoing principle, goods purchased in Russian rubles should be appraised by the Canadian Customs as valueless, because the Russian ruble has no exchange value.

The adoption by Canada, for Customs revenue purposes, of this basis for the nominal valuation of goods from late enemy countries, would give to the products of those countries the most advantageous Customs tariff privilege for shipment into Canada that could possibly be extended to those countries by their greatest friend and ally. No single act of this country could be more pleasing to Germany than a change in our Customs law that would allow importations from Germany and Austria to be appraised to the exchange value of the German mark or the Austrian crown.

Australia absolutely prohibits importations from late enemy countries.

On January 14th, Australia issued a proclamation prohibiting the importation into the Commonwealth of:

(1) Goods manufactured or produced in or brought directly or indirectly from Germany, Austria-Hungary, Turkey or Bulgaria. Goods shall be deemed to have been manufactured or produced in Germany, Austria-Hungary, Turkey or Bulgaria, if more than 5 per cent. of the invoice value thereof has been derived from labor of persons resident in any of those countries, and the onus of proof of the country of manufacture shall be on the importer;

(2) The terms "Austria-Hungary" and "Turkey" mean those countries as existing before the war.

New Zealand likewise prohibits such importations.

The Dominion Government now has no power to prohibit or restrict importations from late enemy countries.

To do this there would have to be an Act of Parliament now that the War Measures Act has lapsed. And it is extremely improbable that any such prohibition would be authorized by Parliament.

Importations into European countries from North America are subject to the handicap of prohibitory adverse exchange rates. But an illustration of how these countries still further impede shipments from America appears in a recent order of the French Government. In this order France protects her markets by ruling American currency as being appreciated instead of her own currency being depreciated. Goods costing $1,000 in American money would have a par value of 5,208 francs. But France appraises such an importation at 11,600 francs for duty purposes. This raises the ad valorem tariff rates of France 123 per cent.

The United Kingdom applies the same rule on importations into that country from the United States and Canada.

It is a fact that in none of the European countries has there been appreciation in costs corresponding to the depreciated value of their currency in relation to the American dollar. And if such depreciation were allowed for duty purposes by this country in the appraisement of the currency of the exporting European country, the goods would not pay duty upon their true fair market value as sold for home consumption in the country of export. But the Customs law makes the value for duty of importations into Canada the fair market value as sold for home consumption in the country of export.

The exchange provisions appearing in the Customs Act of Canada were designed to meet the conditions in those countries whose currency standard is silver, such as Mexico, India, China, etc., where the value of the currency fluctuates in correspondence with the fluctuation in the price of silver.

When one considers that the depreciation of these currencies in relation to our money is so great as to far more than offset the Canadian Customs duty on imports it is ridiculous to contend that the Customs provisions destroy or attempt to destroy the British preference and the difference in present exchange values.

Spread the Gospel of Home Buying

THE good work of spreading the gospel of home buying goes steadily on, gaining in scope and effectiveness as more and more of the people become convinced of the great desirability of the movement. Resolutions galore are being passed by public and semi-public bodies expressing the conviction of members that only by lessening imports can we restore the Canadian dollar to its proper position in international exchange. And a great many articles are being written and published to the same effect.

Members of the Association who issue house organs or company publications might very well make use of these media to impress on their employees the importance of home buying. There are now a great many papers of the sort in Canada and in the aggregate they have large circulations and wield a good deal of influence. We have already referred to some of the arguments advanced by the editors of certain of these publications. Yet another example comes to hand in the February issue of *Gilt & Glimmer*, the house organ of Stauntons Limited, wall paper manufacturers, Toronto, in which the following article is published under the heading,—"What Is Your Dollar Worth?"

"A few weeks ago the Canadian Government shipped to Washington, D.C., the sum of twenty million dollars in gold. This was a payment, in part only, of a bill that the United States held against the Dominion for the difference between the value of merchandise that the two countries had purchased from each other during recent months. The direct object of this part-settlement was to bring down the rate of discount that owing to this large indebtedness the United States banks were able to charge on Canadian funds. The Canadian dollar would only purchase 89 cents worth of United States commodites, so in order to bring it nearer to par value twenty million dollars of our national treasure had to be surrendered. This is as much gold as our Northern mines have produced since January, 1919, and it pledges their production till next June. It is gone forever, no chance of any of us laying our hands on one solitary shekel of it again.

"And what have we received in exchange? A too large number of luxurious automobiles which quickly depreciate in value, a lot of silk or near-silk that could hardly be considered essential, nearly twenty-three and a half million dollars worth of fruit, yet Canada produces the finest fruit in the world, and with a possible few exceptions we could well live on the home-grown variety. There was some wall paper, too, which helped to swell the bill. Then there were a number of other things that could have been left outside. Finally there were necessities such as cotton and coal which we could not reasonably do without.

"So just because people must ride in imported cars and wear imported silk (alleged) apparel, and devour imported fruits, and decorate their homes with imported wall papers, unless we surrendered our gold, we were threatened with the alternative of obtaining only 89 cents worth of coal for one dollar of Canadian currency. Pretty hard on some of us when the mercury slips down below zero!

"One of America's greatest statesmen, none other than Abraham Lincoln himself, has wisely asserted:

"'I know little about tariff, but this I do kony, when I buy goods made abroad I get the goods and the foreigner gets the money, but when I buy goods made at home I get both the goods and the money.' In this case the foreigner is getting our money and giving us only 89 cents worth of merchandise for each dollar he receives from us.

"Then let our Canadian people buy Canadian products for reasons that in part may be simply set forth:

"1. Because they are of *good quality and value.*

"2. In order to bring back the full value of the Canadian dollar in the United States so that it will purchase one hundred cents worth of *necessities.*

"3. In order to give ample employment at fair wages to Canadian workers.

"4. In order to keep Canadian money at home so that it may circulate amongst our own people.

"5. In order to encourage Canadian enterprise and ability.

"So instruct your sales-people to advocate the purchase of Canadian-made goods at all times. Advertise Canadian-made goods constantly. Teach your customers that it is to their advantage to purchase naught else than Canadian-made goods. Start doing it now."

The Canadian Paper Trade Association has had the courage of its convictions. At a meeting held on February 6, in Toronto, the following resolution was passed:—

"Owing to the extremely adverse rate of exchange existing against Canada, we strongly recommend that the members of our Association refrain from purchasing in the United States (wherever possible) until the rate of exchange becomes more normal."

News and Views of the Association

There will be found each month in this department a record of the various activities of the Canadian Manufacturers Association during the preceding month. The information is supplied to INDUSTRIAL CANADA officially, and all members of the Association are urged to acquire the habit of reading and checking over the contents of the department carefully in order to keep themselves posted on the work of the Association

Executive Council Meeting

The regular monthly meeting of the Executive Council for February was held at the King Edward Hotel, Toronto, on the afternoon of Thursday, February 26. The chair was occupied by the first vice-president, Mr. J. S. McKinnon, and there was a very representative attendance of members, quite a number being present from outside points.

A warm welcome was extended to Mr. John F. Ellis, whose resignation from the position of treasurer on account of ill-health was accepted with regret at the January meeting of the Council. Mr. Ellis has since been greatly improved in health, and has signified his willingness to retain office, at least until the next annual meeting. The Council, accordingly, considered his resignation as being withdrawn.

It was announced that, providing the vaccination requirement was lifted, the next meeting of Council would be held in Montreal. Failing that, it will probably take place at Ottawa.

Membership

The special membership campaign, which was begun on December 1 and is still being continued in certain localities, has resulted, to the end of February, in the securing of 492 new members. These are divided among the several divisions as follows: Ontario, 200; Quebec, 151; Maritime, 75; Prairie, 34; Pacific, 32. Reference was made at the February meeting of the Executive Council to the splendid work done by Mr. H. A. Telfer, Chairman, and the Membership Committee, in connection with the membership drive.



Convention Headquarters

Hotel Vancouver, one of the finest of the C.P.R.'s chain of hotels, where the 1920 Annual Meeting of the Association will be held

Ontario Division Luncheon

A luncheon arranged by the Ontario Division was held at the King Edward Hotel, Toronto, on February 26, when members were privileged to hear an address from Professor L. W. Gill, M.Sc., the recently appointed Director of Technical Education for Canada. Dr. Gill reviewed the Parliamentary history of technical education up to the time of the passing of the Technical Education Act last year, and gave the C.M.A. and the Trades and Labor Council credit for having fathered and mothered the legislation. He appealed for the continued support of the manufacturers in carrying out the purpose of the enactment. What had been accomplished to date was explained, and an outline given of the principles under which it was hoped to perfect the system. Following Dr. Gill's address, a vote of thanks was moved by Dr. A. C. McKay, principal of the Central Technical School, Toronto, and seconded by Charles Marriott, president, Toronto Board of Trade.

Motion Pictures

During the past month, on instructions from the Executive Council, an arrangement was concluded whereby Trade Sections of the Association may obtain Canadian-made films at a reasonable price, and have all their rights and interests protected. The Commercial Intelligence Department issued a circular on the subject, inviting members, if interested, to advise the secretary or chairman of any trade organization with which they were connected, so that a full discussion of the situation from all angles might be had. It was reported at the February meeting of the Executive Council that several groups of industries are now making preparations to have their industries filmed.

Exhibition Trains

A communication has been received by the Association from the Minister of Trade and Commerce, outlining a proposal to arrange for a train loaded with made-in-France products to tour Canada, and for a reciprocal proposal for a train of made-in-Canada products to tour France. These proposals were considered by the Executive Committee at its last meeting, and the recommendation was passed on to



Amid a Sea of Mountains

The valley of the Bow River at Banff with the famous Banff Springs Hotel in the foreground,—a prospective stopping off-place for the C.M.A. excursion party

Council for its approval that, while the Association would welcome and approve the suggestion that a made-in-France train should tour Canada, it did not think that it would be possible to organize a made-in-Canada train for France at the present time.

Settlement of Pre-War Debts

Through the Ottawa office, a statement has been received from the Under Secretary of State which intimates that the Trading with the Enemy Act is still in force as applying to uncompleted pre-war transactions, and that direct payment or acceptance of payment on pre-war transactions is not legal, and does not release obligation to pay. The Government policy for handling this phase of the question, together with the reparation by former enemies for Canadian property sequestrated, commandeered or destroyed by the German Government, or for losses incurred through acts of illegal warfare, has not yet been determined upon, but it is practically certain to be handled through some central clearing office. In the meantime, the whole question will be carefully followed out by the Association, and information conveyed to the membership through a circular.

Inter-Empire Trade

In accordance with a request from the Quebec Division Secretary, the Commercial Intelligence Committee have been giving consideration to a letter from H. M. Trade Commissioner's office at Montreal, in which it was pointed out that statements have been made by Canadian manufacturers, protesting against their inability to obtain supplies of various raw materials, grown or produced within the Empire, direct from business houses located in the Empire, since agents and brokers, with headquarters in New York, have been granted control of all North American sales territory, including Canada.

The general policy for the stimulation of trade through Imperial channels, wherever possible, was re-endorsed by the Committee, but it was felt in many of the instances brought before the Committee that any change rested largely with the British or Imperial house concerned making a different disposition of their selling arrangements, as may be warranted by the extent of the market in Canada for the commodity they desire to dispose of, and by the additional services or mutual advantages accruing to the Canadian importer and the Imperial exporter. It was pointed out that Imperial producers were more than ever alive to the value of the Canadian market, and that the natural course of such business was in the direction outlined above, whenever it became practicable to handle business economically through Canadian channels.

The Committee have recommended that H. M. Trade Commissioner be assured of the co-operation of the Association wherever possible.

Transportation Expert to Visit Maritimes

On instructions from the General Manager, Mr. G. P. Ruikbie, of the Transportation Department, left on March 2 for a visit to Maritime Province points, in order to give consideration to the question of freight rate adjustments from the Maritime Provinces to points in Ontario and Western Canada. It is the object of this investigation to give every assistance to members in the Maritime Provinces. The question of rates is being gone into very carefully, and every effort will be made to have the matter given proper consideration.

Cloak and Suit Section

An application has been received from a number of cloak and suit manufacturers, who are members of the Association, asking permission to form themselves into a section of the Association. As the applicants have conformed to the regulations set forth in the by-laws, the Executive Committee recommended to Council the approval of the application, which has been granted.

Calgary Branch Officers

At a meeting of members of the Calgary Branch, held on February 5, the following officers were elected: Chairman, R. J. Hutchings, Great West Saddlery Co.; Vice-Chairman, C. J. Williams, Alberta Box Co.; Hon. Secretary, P. S. Woodhall, Sheet Metal Mfg. Co. The former officers were: Chairman, Wm. Georgeson, Tuxedo Coffee & Spice Mills; Hon. Secretary, Wm. Innes, P. Burns & Co.

Co-ordination of Labor Laws

A communication has been received from the Minister of Labor, stating that he proposed to assemble a commission for the purpose of co-ordinating and unifying labor laws of Canada, in accordance with a resolution passed at the National Industrial Conference, held in Ottawa, September 15-20, 1919. This commission will assemble in Ottawa about the end of next month. The Minister of Labor has asked this Association to name the representative of the employers on this Commission.

Made-in-Empire Shopping Week

The Trade and Industry Committee of the Royal Colonial Institute, London, England, have been working on a proposal to establish simultaneously, in all quarters of the Empire, a made-in-Empire Shopping Week, to take place during the week in which Empire Day occurs next year. The Council of the Royal Colonial Institute have approved

of the plans outlined, and a request has come forward that the C.M.A. express its considered opinion in regard to the proposal. The Commercial Intelligence Committee have had the matter in hand and, while approving of the underlying principles, will give the proposal further consideration.

Canadian Goods for Big Hotel

Effective work in the direction of securing consideration for Canadian materials and furnishings in connection with the construction of the big addition to the King Edward Hotel, Toronto, was done last month by a special sub-committee of the Toronto Branch Executive. This sub-committee, consisting of W. C. Coulter, the Branch Chairman; S. R. Parsons, Thomas Roden, J. E. Walsh and H. Macdonald, waited on Mr. O'Neill, general manager of the hotel company, and urged upon him the desirability of using Canadian products to the greatest possible extent in the building operations soon to commence. Mr. O'Neill stated in reply that it was the desire of the management to give the preference to Canadian-made goods, and added that any manufacturers making goods needed by them would receive every possible consideration when it came to buying.

Activities of Quebec Division and Montreal Branch

By R. W. Gould
Secretary, Quebec Division, C.M.A.

Many matters of Dominion-wide importance have been occupying the mind of the Executive, both of the Province and the Montreal Branch, during the past month. The "Travel in Canada" suggestion, which came from head office recently, has been well received also. Manufacturers have warmed up to the suggestion wonderfully, and Quebec will fall in line at once in any scheme of this kind, calculated to make the Canadian take a greater interest in his own country as a vacation land.

We almost felt equal to Toronto at the Montreal office one day this month, when we had a visit from the General Manager, Mr. J. E. Walsh; Mr. S. B. Brown, Assistant Manager, Transportation Dept., and Mr. Alex. Marshall, of the Commercial Intelligence Department. On that day we could have very nearly held up our end against head office in any matter. The visits of Messrs. Walsh and Brown to the Montreal Branch during the past month have been heartily welcomed by the members. When we see them often we are filled with the realization that we are a real factor in the Association, and headquarters regards us as such.

Montreal promises a good representation at the "Get-Together" Luncheon, to be held in the City of Quebec on Thursday, March 4th, at the Chateau Frontenac, when the opening gun will be sounded in a membership campaign in that city.

The Division has made its helpful influence felt to a considerable extent during the month in the assistance it has given the Dominion Bureau of Statistics in collecting the census of industry returns. Mr. R. H. Coates, the Dominion Statistician, has written the Branch Secretary, thanking us for our assistance and co-operation.

The movement on foot here to hold a World's Fair in Montreal in 1925 has not gone unnoticed by the Branch. Lt.-Col. W. J. Sadler, Chairman of the Montreal Branch; Mr. C. Howard Smith, Vice-Chairman of the Provincial Division, and Mr. S. J. B. Rolland, of the Montreal Executive Committee, have been named to look after the interests of the manufacturers of Quebec in this matter, should it take definite shape. Mr. T. P. Howard, the Dominion President, is also taking a hand.

New members are constantly coming in, and the services of the Association are being more and more appreciated.

A last word. Quite a number of our Quebec manufacturers are planning to attend the annual convention on the Pacific Coast in June next. The Quebec Division is determined to be well represented on this occasion.

Alberta Manufacturers Meet

Interview Government

A meeting of members of the Alberta Branch, C.M.A., was held in Edmonton on February 9 and 10, with more than thirty members in attendance. The chair was occupied by C. G. Robson, Edmonton, and among those present were:

From Calgary: M. J. Hutchings, Great West Saddlery Co.; Brig.-Gen. H. F. McDonald, Alberta Industrial Development Co.; R. L. Fowler, R. L. Fowler & Co.; P. S. Woodhall, Sheet Metal Manufacturing Co.; Wm. Tunis, P. Burns & Co.,



A Sight Worth Seeing

Train emerging from the lower portal of the world-famous spiral tunnel near Field, B.C., on the C.P.R. transcontinental line to the Pacific coast

Ltd.; H. Hutchings, Western Printing & Litho Co.; C. Y. Williams, Alberta Box Co.

From Medicine Hat: R. P. Stewart, Alberta Clay Products Co.; W. A. Church, Alberta Linseed Oil Co.; J. B. Swan, Ajax Coal & Mining Co.; Geo. Preston, Lake of the Woods Milling Co.; A. Andrews, Ogilvie Flour Mills Co.; Geo. Lydratt, Red Cliff, Dominion Glass Co., Ltd.

From Edmonton: A. W. G. Clark, Edmonton Cement Co.; C. G. Robson, W. H. Clark & Co.; A. W. Challand, J. J. McLaughlin Co.; J. H. Millar, Acme Brick Co.; C. G. Sheldon, Humberstone Coal Co.; J. L. Moldor, Swift Canadian Co.; G. M. Hall, Edmonton City Dairy; H. F. McKee, Gainers', Ltd.; Mr. Courtney, Courtney Man. Co.

On February 10 twenty-five members of the Branch engaged in a discussion of manufacturing problems with the provincial cabinet. The delegation expressed themselves as being sympathetic with labor, averse to the granting of any special privileges, and in favor of uniformity of laws among the provinces, but impressed upon the Government their desire that before any legislation is enacted, which directly affects the business and interests of manufacturers, that members of the Association be advised of the proposed laws, and be given full opportunity for expressing their stand on such matters.

R. J. Hutchings, of Calgary, was the first speaker. Mr. Hutchings laid stress upon the necessity of encouraging manufacturing in the province, inasmuch as Alberta possessed almost unrivalled advantages in this respect. But possibly 60 per cent. of the initial manufacturing enterprises failed. While they desired, above all things, to be fair to labor, there must not be legislation which would lay any heavier burden upon manufacturing, and which would only serve to cut down production, already seriously falling short, and making the cost of living ascend more and more.

"The Government's slogan of 'Greater Production' cannot be harmonized with the agitation for shorter hours," said Mr. Hutchings. He went on to say that in some branches of business orders were plentiful, but uncertain markets and rising costs of raw material, with the certainty that there was inflation impossible to be permanently maintained, made manufacturing a decidedly precarious undertaking at the present time. This point was emphasized by other speakers repeatedly.

Charles Pratt, of Medicine Hat, urged more uniformity of laws affecting manufacturing. Alberta products were sold all over Canada, and conditions of production must be made as nearly equal as possible, in order to meet competition. The manufacturers asked fairness in legislation, and nothing more.

Secretary G. E. Carpenter, of the Prairie Division, C.M.A., complimented the Alberta Government for their courage and vision in assisting industrial research. They needed encouragement, but asked no special favors. Due to the fact that sixty per cent. of western manufactured goods must meet continental and world competition, there must, however, be no undue burdens laid on the shoulders of the western concerns. Mr. Carpenter also commended the Alberta Government highly, and his statements were applauded when he said that in the system of state insurance already carried out in the province the cabinet had strongly opposed any placing of undue burdens on manufacturers. Two years had shown this policy to be soundly based and a real success.

In view of the unsettled state of world affairs, Mr. Carpenter asked that the provincial legislature delay sanctioning the labor conventions of the peace treaty until such time as other allied countries have adopted them; otherwise, manufacturers here might not have a ghost of a chance in competition with places where the conventions would not be in force. However, Canadian manufacturers were willing to meet all competition on a legitimate level and under the same international standard of working hours, wages, etc.

Hon. A. G. Mackay suggested that labor and the manufacturers hold conferences, and try and get together on many of the issues involved, before the Government is approached. Mr. Carpenter said this was desirable and practicable in many cases where issues were purely local, but in export business this was not such an easy matter.

Premier Stewart assured the delegation of the Government's desire to see manufacturing encouraged in the province. He wanted uniformity of laws, so that Alberta manufacturers were on the same basis as those in other provinces.

Before adjourning, the delegation, on an explanation from Mr. Boyle, declared themselves in favor of inspection of factories by the Compensation Board, instead of by both Board and Factory Act officials. Mr. Boyle said this legislation was under consideration, and proposed changes also have in view a rating on the basis of merit in factory conditions and equipment. This was heartily approved by the delegation.

Activities of Toronto Branch

By H. MACDONALD
Secretary, Toronto Branch, C.M.A.

The Toronto Branch Executive have given further consideration to the effect of the harrassing restrictions imposed by the city under the smoke by-law, which are calculated to discourage industries from locating in Toronto district. The Committee have decided that, if industries are to experience further trouble, action will be taken in support of a rescission or modification of the present regulations.

British Immigration

The Toronto Branch Executive have appointed the following Committee to consider the best form of organization to assist and systematize the transportation of British immigrants anxious to come to Canada, namely: Messrs. H. A. Telfer, J. Allan Ross, H. N. Cowan and C. E. Edmonds.

Advisory Industrial Committee

Owing to increased engagements as first Vice-President of the Association, Mr. J. S. McKinnon has retired from the Advisory Industrial Committee of the Board of Education, and Mr. Henry H. Mason has also tendered his resignation, owing to business engagements. Both these gentlemen have rendered long and efficient services on the Committee. Mr. W. C. Coulter, the chairman of Toronto Branch, and Mr. W. H. Shapley were appointed in their stead.

Membership Campaign

As the result of the special Membership Campaign which was begun on December 1st, and is still being continued, 90 new members have been added to the branch, making the present membership 925.

Shortage of Power.

A special committee of the Toronto Branch has had conferences with the Commissioners and officials of the Toronto Hydro System, owing to the loss and trouble occasioned to the industries within the Toronto district, largely

due to the changing weather conditions and consequent ice trouble, which seriously reduced the output of the plants at the Falls, which supply the system. It was explained by the general manager of the Toronto system that one of the plants from which the whole Hydro demand was normally 60,000 horse-power, recently supplied only about 5,000 horse-power. The capacity of the other plant was reduced to about fifty per cent. and the power available for the system in Toronto was thus less than one-half what was required to serve customers.

In order to relieve the present conditions and make provision to meet the demand until the completion of the Chippewa development, Mr. Couzens explained that this could be met:

1. By the purchase of sufficient additional power generated by water or steam.
2. By the diversion of power (now exported to the States) to the Hydro Commission.
3. By the installation of a steam plant or steam plants.
4. By the purchase of existing plants.

As regards these, the first and fourth are under way by the Ontario Hydro Commission. The second involves a big question of policy and may readily become an international matter. The third involves heavy expense and increased charges, as the capital cost of a steam plant to-day would be in the neighborhood of $150 per kilowatt or about $110 per horse-power.

The committee think that the co-operation of every Hydro user, whether domestic or industrial, should be given to assist in conserving power and light, in every possible way, in order that an uninterrupted service may be maintained in the industries, until a further supply of power is obtained for the system.

Citizens' Research Institute

Dr. H. L. Brittain has conferred with the Toronto Branch Executive on the subject of a Dominion-wide organization of citizens, to be known as the Citizens' Research Institute of Canada, whose business it will be:—

1. To obtain, in an unbiased and non-partisan manner, the fact basis underlying the administration of the peoples' affairs in the Dominion, the Provinces and municipalities and of community interests in general.

2. Through the publication and discussion of such facts to create a well-informed citizenship.

It is thought that if such research organizations are necessary in a municipal field, there is a much greater need in the provincial and national field.

At present a very real unrest exists in the industrial, social and political phases of national life. The only way to remove this is to discover and remedy the causes. The institute, by obtaining, in an unbiased spirit of research, the pertinent facts in relation to the various phases of community life, and presenting them in a form easily assimilated by the people, should assist in promoting clear thinking and effective action in this connection.

The Institute will be governed by a Board of Trustees, who shall receive no remuneration, elected by and from the members at the annual meeting. No paid official of a Dominion, provincial or municipal government can hold the position of trustee. The Institute will be supported entirely by voluntary contributions.

The Executive Committee of Toronto Branch has, upon inquiry, endorsed the Institute and has promised to support Dr. Brittain in his new work. As Canadians, we are all vitally interested in efficient and economical administration in the local, provincial and Dominion field. The Executive has, therefore, arranged for a special conference with Dr. Brittain, with a view to determine the best means of making its endorsation effective.

Ontario Division's Work

By H. MACDONALD
Secretary, Ontario Division

A joint meeting of the Executive Committee and Transportation and Power Sub-Committee of the Ontario Division was held in the Royal Connaught Hotel, Hamilton, on January 28. Mr. George H. Douglas, chairman of the division, presided. The committee gave full consideration to the situation arising from the shortage of power and its serious effect upon many of the industries. After full discussion, taken part in by the chairman, Messrs. Waddie, Whitton and Coulter, it was resolved that a representative committee, on behalf of the Ontario industries, be organized to wait upon the Hydro Electric Power Commission on the return of Sir Adam Beck from England, to discuss the whole power situation in Ontario—the selection of the personnel of the committee being left in the hands of the Chairman and Secretary.

Employment of Returned Men

A joint meeting of the Executive Committee and Legislation Committee of the Ontario Division was held in the Association's offices on February 20th. Mr. George H. Douglas, Chairman of the Division, presided. Correspondence was submitted from the Business Council of the Citizens' Repatriation League, Toronto, referring to difficulties in connection with engaging disabled returned men on account of there being greater danger of these men meeting with an accident than in the case of a man without physical disability, and the placing thereby upon the employers the liability of heavy compensation under the Workmen's Compensation Act.

The opinion of the meeting was that there was no reason to assume that there had been any disposition on the part of employers to discriminate against any class of returned men, and they directed the Secretary to notify the Business Council that if special cases of complaint in this regard could be submitted, full inquiry would be made.

Moratorium Act

It appearing from the press reports that Attorney-General Raney had invited expressions of opinion on the question whether the moratorium legislation should be continued or repealed in Ontario, the Legislation Committee of the Ontario Division resolved to communicate to the Attorney-General an expression of opinion that repeal of the Moratorium Act should be delayed for six months after sufficient notice had been given.

Workmen's Compensation Act

The Legislation Committee of the Ontario Division have recently issued a questionnaire to employers in Ontario inviting an expression of their views as to the working out of the Act, whether generally or in relation to their particular plant. The Committee have fully considered the replies received and have referred the whole question to a special committee for further consideration and report, with special reference to recommending an adequate system of merit and demerit rating.

Who Goes to San Francisco?

By A. MARSHALL
Manager Commercial Intelligence Department

The Commercial Intelligence Committee have been invited to submit suggestions as to how best the invitation of the National Foreign Trade Council of the United States, tendered through the British Consul-General, to a representation of Canadiaa business men to attend the seventh National Foreign Trade Convention in San Francisco, may be availed of.

The National Foreign Trade Council of the United States is a non-partizan and non-political organization, devoted solely to the development of International Commerce. The Convention held under its auspices is primarily a gathering of the representatives of all phases of the international commerce of the United States, from all parts of the country, for the discussion and consideration by business men of the problems arising out of their daily transactions. Both the import trade and the export trade are fully dealt with.

The Foreign Trade Council considers that it is reciprocally to the advantage of producers and distributors in foreign markets, as well as those of the United States, to meet at such a convention for the mutual interchange of views and information regarding market conditions, production, trade customs and regulations, and all matters affecting the flow of commerce between them.

At this convention it is proposed to make a new departure from the regular procedure by inviting, as delegates from other countries, experienced representatives engaged in the different phases of international commerce. In this connection, it is planned to arrange a series of group sessions for the special consideration of trade relations between the United States and other individual countries, as, for instance, a group session on Japan, one on China, one on Australia, and so on, the groups being composed of United States business men and the delegates from the particular country whose trade is under discussion.

It is decided that all the delegates are to be representative only of international commercial interests and not of the Governments, and it is desired that some of them will be equipped to meet United States delegates in individual private consultation, for the dissemination of information as to market conditions in the countries from which they come, and for the consideration of problems arising out of the particular trades concerned.

The Foreign Trade Council of the United States also wishes to point out the value of the opportunity this plan affords to the foreign delegations to meet at one time and in one place a large number of United States business men, representing every factor of United States production and distribution and every geographical section of the United States.

However, many individuals or trades may consider it desirable to interest themselves in the proper representation of the varied Canadian interests. Will those who are interested kindly communicate their suggestions to the Commercial Intelligence Committee at the Association address, 1404 Traders Bank Building, Toronto Ont?



In the Heart of the Rockies

View of the Kicking Horse River at Field, B.C., on the return route of the 1920 Annual Meeting Excursion

Annual Meeting Itinerary

Excursion to the Coast

The following is the itinerary which has been mapped out in connection with the Annual Meeting Excursion to the Pacific Coast. Members will note that the trip will consume practically three weeks, excursionists leaving Toronto on Saturday, May 29, and arriving back on Friday, June 18.

Via Canadian Pacific Railway

Lv. Toronto	10.00 p.m.	Saturday	May 29
Ar. Winnipeg	1.30 p.m.	Monday	May 31
Lv. Winnipeg	11.59 p.m.	Monday	May 31
Ar. Brandon	3.50 a.m.	Tuesday	June 1
Lv. Brandon	10.00 a.m.	Tuesday	June 1
Ar. Regina	4.30 p.m.	Tuesday	June 1
Lv. Regina	6.45 p.m.	Tuesday	June 1
Ar. Moose Jaw	7.55 p.m.	Tuesday	June 1
Lv. Moose Jaw	11.00 p.m.	Tuesday	June 1
Ar. Medicine Hat	8.00 a.m.	Wednesday	June 2
Lv. Medicine Hat	1.00 p.m.	Wednesday	June 2
Ar. Lethbridge	5.00 p.m.	Wednesday	June 2
Lv. Lethbridge	1.30 a.m.	Thursday	June 3
Ar. Calgary	7.00 a.m.	Thursday	June 3
Lv. Calgary	12.30 a.m.	Friday (approximate)	June 4
Ar. Edmonton	8.45 a.m.	Friday	June 4

Via Canadian National Railways

Lv. Edmonton	8.00 p.m.	Saturday (approximate)	June 5
Ar. Vancouver	7.00 a.m.	Monday (approximate)	June 7

Via Canadian Pacific Railway.

Lv. Vancouver	10.30 a.m.	Thursday (C.P.SS.)	June 10
Ar. Victoria	4.30 p.m.	Thursday	June 10
Lv. Victoria	2.30 p.m.	Friday	June 11
Ar. Vancouver	7.00 p.m.	Friday	June 11
Lv. Vancouver	8.30 p.m.	Friday	June 11
Ar. Lake Louise	8.45 p.m.	Saturday	June 12
Lv. Lake Louise	4.00 p.m.	Sunday	June 13
Ar. Banff	5.00 p.m.	Sunday	June 13
Lv. Banff	10.00 p.m.	Monday	June 14
Ar. Calgary	12.45 a.m.	Tuesday	June 15
Lv. Calgary	1.45 a.m.	Tuesday	June 15
Ar. Winnipeg	6.00 a.m.	Wednesday	June 16

Via Rail—Winnipeg to Toronto

Lv. Winnipeg	6.00 p.m.	Wednesday (C.P.R.)	June 16
Ar. Ft. William	7.00 a.m.	Thursday (C.P.R.)	June 17
Lv. Ft. William or Pt Arthur	3.00 p.m.	Thursday (C.P.R.)	June 17
Ar. Toronto	8.00 p.m.	Friday (C.P.R.)	June 18

Via Lake Route—Winnipeg to Toronto

Lv. Winnipeg	7.00 p.m.	Thursday (C.P.R.)	June 17
Ar. Ft. William	8.00 a.m.	Friday (C.P.R.)	June 18
Lv. Pt. Arthur	1.00 p.m.	Saturday (C.P.SS.)	June 19
Ar. Toronto	11.45 a.m.	Monday (C.P.R.)	June 21

The Situation and Outlook at Ottawa

The Question of an Election a subject of considerable importance at the present time—A Forecast of probable legislation at the present session—Appropriations to be cut down with great severity

By Industrial Canada's Parliamentary Correspondent

Realizing the great importance attaching to developments at the Capital, arrangements have been made for the publication each month during the present session of Parliament of an article interpreting events for the benefit of our readers. The first of these articles, written at the opening of the session, appears on this and the following page.

Ottawa.—The question of an election was obviously the matter of chief concern for all persons and parties at the opening of Parliament. This was natural, as preparations for general elections have been under way for some time.

When Hon. Mr. Crerar left the Government last session, he regarded his resignation as a first step in his campaign, and he followed that step by touring Canada on a speaking trip, organizing farmers in all parts of the country for the next voting contest.

He has figured in several of the bye-elections, and to-day finds himself in the House at the head of a group of twelve men who sit on what they designate as "cross benches" and vote independent of both parties, but are generally against the Government.

The Liberal National Convention of last summer was the great preparatory step of the Liberals for a general election. It has been followed by other details of party organizing, including the appointment of a capable man, in the person of Mr. John Lewis, to prepare campaign literature and generally to look after publicity.

Government Does Not Want Election

The Government, which does not want an election, has been forced to follow the lead of its opponents, and take measures for its defence. The evidence of this is that Hon. Mr. Meighen, Hon. Mr. Calder, Sir Henry Drayton, Hon. Mr. Rowell, and other spokesmen for the Government, have been taking the platform during the past six months, whenever opportunity offered, to promote the standing of the Government in the country by spoken word.

The Speech from the Throne contained the promise of a franchise act, which was necessary for an election, as the War Times Election Act could not be used. The passage of the franchise measure will make the holding of an election possible.

The first declaration of Hon. Mackenzie King at the opening of the session was that there should be a revision of the tariff, and he closed the speech with a demand for a general election, and emphasized the demand by an amendment to the Address, insisting that the enactment of the franchise bill be followed by an immediate appeal to the people.

But, in spite of all the campaign preparation, there is not likely to be a general election this year nor, indeed, until another session of Parliament has been held, and the constituencies of the country subjected to redistribution. Sir George Foster scoffed at the idea, and intimated that the Liberal leader was posing.

The Government does not want an election, and it is suspected that neither Hon. Mr. King nor Hon. Mr. Crerar want one as badly as they declare. Neither of them feels that his organization is what it should be, and Mr. Crerar, in particular, is in the difficult position of dealing with a most radical following. He would be glad to have the farmers, east and west, who want to make him Prime Minister without delay, have the opportunity of seeing how the Drury Government of Ontario, under the responsibility of administration, handles the questions that every Government has to deal with. The followers of Hon. Mr. King would be well satisfied to draw one or two more indemnities without placing their seats at the hazard of a general election.

Might Stay Until 1923

Therefore, the problem of the Government continuing in office may not be as difficult as it appears.

Under the constitution, the Government would be able to remain in office until 1923, providing it can continue to command a majority of the voting strength of the House. At present its majority is about fifty. Bye-elections have been running against it, and may continue to do so, but a fifty majority is a large one to overcome, and should last as long as the Government wants to keep the present Parliament alive.

The argument that there should be no election until after redistribution, is one that can be strongly used in support of the wide feeling throughout Canada, among the more responsible classes, that the country is not in a sufficiently settled mood to express itself at the polls as it would desire.

The decennial census of the country will be taken in June, 1921, and the constitution calls for redistribution of electoral ridings immediately after each census, and before an election is held. If urgent conditions require, there could be a special session in the early autumn of 1921, for the passage of a redistribution bill, and an election immediately thereafter, or as long afterward as the Government pleased, up to the statutory limitation of the spring of 1923.

Election Forecast for 1922

A fair forecast would be that the redistribution would come at the regular session of the winter of 1922, and the election in the autumn of the same year.

Parliament meets with the general feeling that the standing of the Government with the country is not strong; that feeling is shared by most of the ministers of the Government. But, there will be ample time for a considerable change of sentiment among the electors if no unexpected development brings on the election until 1922. Business will have time to improve, unrest to disappear; the business relationships of Canada with the United States, with Britain

and with the world generally, may be on a considerably different basis.

One has but to glance over the events since the last general election to form an idea of how fast the world moves and what may happen between now and the next voting day to change the minds of a majority of the electors.

In the matter of leadership, for instance, since the last election, the Liberals lost Sir Wilfrid Laurier through death and acquired Hon. Mackenzie King through convention. The Conservative party, of which Sir Robert Borden was the head, was submerged by that leader in the support of the Unionist Government, and Sir Robert wore himself out in work for his country and his Empire to such a point that it is doubtful if he will be able again to take the same forceful part in public affairs that he was accustomed to take for many years.

Development of Agrarian Movement

Since the last election there has been seen the development of the agrarian movement in politics, and the tacit selection of Hon. Mr. Crerar as head of the third party. Since that election the world has seen the end of the Great War, and the effect of the conclusion of strife was profoundly disturbing in Canada. So much so, that the constitutional system of the country was challenged by the leaders who brought on the strike at Winnipeg. Since that election Canada advanced in the status of a nation through being accorded the right to address its representations to the king direct, instead of through the British Government; the right to deal directly with Washington in matters of concern only to Canada and the United States; and, finally, recognition as a nation by the gift of a membership in the League of Nations. In the last election the franchise was extended to women for the first time, and they are now secure in the possession of voting power for federal elections. The application of Government ownership was extended to the Grand Trunk Railway, and Canada became the owner and operator of a fleet upon the Atlantic Ocean. The Dominion, which was forced to cease being a borrowing nation, has become a lending nation, through the extension of credits to European countries for the purchase of goods; the authority of organized labor has been considerably extended; the practice of making gifts of knighthoods and other honors to Canadians has been abolished. Finally, for the first time in the history of Canada, a province has made the experiment of departing from the party system in politics; has rejected the trained public man, who has been contemptuously called "the professional politician," and has elected a class to govern for the whole. This was done when the great and conservative province of Ontario turned down the Conservative Government and the Liberal opposition, and voted in the farmers, with authority to carry on Government. This is an experiment in administration, which is being closely watched by both friends and opponents of the movement, especially at Ottawa, where politics is something of a science—or, at least, a study—and where there are many seasoned observers who had long since come to the conclusion that the best administration was to be obtained from the man who made elections and administration his business.

However far the next election may be deferred, it is certain that the present session will be conducted on the assumption that an election may take place this year, and every move by every faction will be made with the view of strengthening itself with the country for the voting test.

The legislative programme of the Government, contained in the Speech from the Throne, is meagre in the extreme. The promise of a franchise measure is the only item worthy of note. But this must not lead to the conclusion that the legislative measures of the Government will not go beyond the programme in the Speech. It is the habit of Governments to reserve a good deal of their business until late in the session. Last year, for instance, a session called to ratify peace wound up by purchasing the Grand Trunk Railway.

Among members there is much interest taken in the significance of two events which have taken place elsewhere in the world, and which concern the nationalization of the public utilities of a nation. In the United States the railways, which were seized during the war, have been handed back to their owners by an administration which apparently found the problem too great and the deficits too heavy. The election of Hon. Mr. Asquith in Paisley is the second. There it is recognized that a man, who had the knowledge of administration which enabled him to discuss the question of nationalization with authority, gained from experience, went into a riding which was one of the industrial hives of the United Kingdom. The workmen were the electors, and they had been taught by the labor leaders that nationalization of industry was the goal to be aimed at. Hon. Mr. Asquith challenged the soundness of the Labor view, and succeeded in convincing the Labor electors of that riding that nationalization was not sound. His return is regarded at Ottawa as evidence that a good case, well fought, will make for success in Canada as well as in the Motherland. So we have the paradox of a Unionist Government in Canada being cheered by the election of a distinguished Liberal in Britain.

There is much concern as to the future of taxation, and as to what will be disclosed along this line when Sir Henry Drayton reveals the secret in the budget speech. One of the things which war did for Canada was to advance very considerably the application of direct taxation. The demands of the treasury are so great that there does not appear a likelihood of this being modified. The income tax is in Canada to stay.

Extension of Excise Tax

It is almost certain that there will be an extension of the excise tax, which has been applied to pianos ,automobiles, and other articles classed as luxuries. There is hardly a limit to which taxation may be extended in this way, and it may be found that the list will be so enlarged as to include a good many necessities, and to yield the Government a large measure of the revenue that it requires.

The Government proposes to set the example of economy to the country. Therefore, the appropriations will be cut down with great severity. Places that desire public buildings, communities that wish the improvement of harbors or other local works, the Canadian National Railways in the matter of extensions and betterments, and a thousand other applicants for funds from the Treasury, are likely to meet with disappointment when the estimates are tabled in Parliament. With its interest and pension bills, the Government has to economize, and it is determined to do so.

The greatest expenditure of a new kind is likely to be for the construction of more ships for the Canadian Government fleet. The tonnage of the world is short, and therein lies the difficulty of extending abroad the trade of Canada. The Government is convinced that ships are a good national investment at the present time, and is willing to spend the money necessary for their construction.

Legislation and discussion are two different things in

Parliament. It takes a bill, and usually one introduced by the Government, to become law. Discussion may be brought on by any member who can frame and move a resolution. Therefore, Parliament will hear much talk that is not intended to lead to any results other than to excite or attract the people in the country. The question of exchange, of the position of returned soldiers, of membership in the League of Nations, of further railway nationalization, of domestic commercial control either through the Board of Commerce or in some other way, of immigration, highway improvement and a hundred other things, are likely to be discussed.

The question of Government is certain to be brought under review; and there will be any amount of tariff discussion.

Changes in the Trade Mission in London

OVERSEAS' BRANCH FORMED

THE Trade Mission in London during 1919, under the presidency of Mr. Lloyd Harris, carried on a successful work in Great Britain, and was instrumental in making large sales of Canadian products to that and other European countries, aided thereto materially by various credits granted by the Canadian Government. The Commission was designed to fill an emergency and was never intended to operate permanently on the basis laid down for its temporary activities.

The credits given last year fell in at the end of the year, and unless, and as renewed, that factor will hereafter be absent. In order to provide for the expenses of the Mission, whose chief business was to procure contracts for Canadian producers, supervise them and distribute them in Canada, and to facilitate and supervise delivery to European purchasers, a small commission was charged to the parties receiving the contracts. This feature will also disappear, being in fact inadvisable and impracticable on the part of a Government in the normal processes of purchase and sale.

Now Branch of Department

In the place of the Special Trade Commission, a branch of the Department of Trade and Commerce has been constituted in London, to be known as the Overseas Branch, Department of Trade and Commerce, Canada, under the direction of Mr. W. C. Noxon, who was chief assistant under Mr. Harris, and who has had the benefit of last year's operations and activities in Europe, and who has, besides, an intimate knowledge and intimate experience of trade and industrial conditions in Canada.

With Mr. Noxon will be associated Mr. Harrison Watson, Chief Trade Commissioner in the United Kingdom, who, with his associated Trade Commissioners, will co-ordinate their work with the Overseas Branch. A sufficient staff will be provided to carry on the work along the lines of commercial intelligence, shipping, publicity, and transport. The offices will be those formerly occupied by the Trade Commission—The British Columbia Building, 1 Lower Regent St.

The Trade Intelligence Branch will, through Mr. Harrison Watson, keep in close touch with the Canadian Trade Commission in the United Kingdom, and on the continent, and will receive and transmit commercial information, and so link up with the London headquarters the activities of the whole body of Canadian Commissioners in Europe. This will give a network of trained and intelligent men in the United Kingdom, France, Holland, and Belgium, Italy, Greece, Spain, Poland, Czecho, Slovakia, Servia and Southern Russia—all connected with London Overseas Headquarters and working in strict co-operation therewith.

The Overseas Branch will have the advantage of close and constant touch with the High Commissioner in London, who will be the medium and advisor in all official and governmental communications with the departments of the Government in London, with the official commercial representatives of the various Governments represented in London, and the High Commissioners and representatives of the Overseas Dominions, India and the Dependencies.

Aims of Overseas Branch

It will not be the duty of the Overseas Branch to make sales or purchases or negotiate contracts for individuals or corporations. This must be left to their own representation and effort.

It will be the aim, through the Overseas Branch:

1. To provide a convenient commercial meeting place for Canadians visiting London for business purposes, where they will be made welcome, and can find men ready and willing to give them advice and information.
2. To have at hand full and pertinent information as to the conditions of trade, openings for business, demands for Canadian supplies, and possible contracts; to facilitate conferences with business firms, manage introductions to business houses, and in every legitimate way aid Canadians to extend trade.
3. Conversely, the Overseas Branch will be a Canadian bureau of business information as to Canadian products, where persons desirous of doing business with Canadians may find ready answers, careful directions, and sound, reliable counsel.
4. To give reasonable and uniform publicity to Canadian resources and productions and opportunities.
5. To establish a wide-awake and efficient commercial liaison office between Canadian producers and world buyers in the great mart of London, and to that end the Overseas Commercial Branch in London will keep in close touch with the Commercial Intelligence Branch of the Department of Trade and Commerce in Ottawa.

The activities of the Canadian Trade Commissioners, as outlined above, in co-operation with the London Headquarters, will not interfere with the system hitherto pursued of constant communications with the Department of Trade and Commerce at Ottawa and the business men of Canada.

Scholarships at McGill

Canadian Pacific Railway Company Make Offer to Employees and Sons of Employees

The Canadian Pacific Railway Company are offering a free scholarship, covering four years' tuition in architecture, chemistry, civil, mechanical or electrical engineering at McGill University, subject to competitive examination, to apprentices and other employees enrolled on the permanent staff of the company and under twenty-one years of age, and to minor sons of employees. The competitive examination will be held at various centres in June. Scholarships will be renewed from year to year, to cover a period not exceeding four years.

The Press Condemns Business Profits Tax

Newspapers of Canada Enumerate Many Reasons Why Tax Should Not Be Re-imposed—It Impedes Business, Interrupts the Flow and Employment of Capital and Operates to Dry Up the Source Whence It Is Derived

(A Symposium of Editorial Views)

IN the opinion of many of the most influential newspapers in Canada, the business profits war tax should not be reimposed by Parliament. The serious effect which its imposition has had on the progress of industry is emphasized, while arguments are also levelled at the inadequacy of the tax to meet the needs of the situation. A number of excerpts from the editorial pages of the Canadian press, bearing on this important question, are reproduced, in order to show the attitude of the press towards the subject.

THE EXCESS PROFITS TAX

(Kingston Standard, Jan. 23, 1920)

The question of the excess profits tax will have to be considered at the coming session of Parliament, and it will prove to be rather a difficult one. There is a danger to the public which cannot be altogether disregarded, which has been pointed out as affecting it in the States, and which, of course, applies as much in Canada. It has been well stated by Mr. M. F. Frey, the well-known American Tax Consultant, when he says that a manufacturer, merchant, or other business concern, subject to the tax, in most instances, estimates in advance the amount which he is compelled to add to the selling price of the commodity, in order to pass the same on to the ultimate consumer, so as to protect himself against the heavy imposition. Because of the uncertainty and complexities of the law, a business concern is apt to overestimate, rather than underestimate, its liability. In doing this, it often becomes an unintentional profiteer, in safeguarding itself from an undue usurpation of its earnings. Thus, prices are increased to the consumer by amounts more than sufficient to cover the tax.

It may be remembered that this has been pointed out in Canada, and it will have to be considered when the tax comes up for discussion in Parliament.

SHACKLES ON CAPITAL

(Montreal Financial Times, Jan. 24, 1920)

When Hon. Arthur Meighen, in a speech to the Shoe Manufacturers' Association, almost within one breath emphasized the need of increased production, insisted that manufacturers must be taxed to the limit, and hinted at a revision of the tariff which would remove some of the protection now afforded Canadian industries he was uttering self-contradictions. The necessity for more production has been voiced by the very highest Governmental authorities and the greatest financial and industrial experts of the nation, but increased production implies the employment of increased capital, and that is not likely to be forthcoming if, on the one hand, it is exposed to a scale of taxation which approaches confiscation, and, on the other, to a devastating competition from outside. Hon. Mr. Meighen recapitulated the scale of the income taxes in force in Canada, which increases rapidly in ratio as the incomes reach higher figures, so that while a man with $20,000 income pays practically ten per cent., the possessor of a $100,000 income pays nearly one-third to the Government, while from a $100,000,000 income virtually two-thirds is taken. Quite oppositely, the Montreal *Gazette*, in the same issue in which Hon. Mr. Meighen's speech is reported, has this to say of the business profits and income taxes:

"The fault of a business profits tax is that it impedes business, interrupts the flow and employment of capital, operates to dry up the source whence it is derived. The Government must have revenue, to obtain which it should encourage the use of capital and assist the enlargement of business—not quench either at their source. An income tax is proper, and is not a new thing. From the profits of business income will be produced, upon which taxes can be levied, and it seems a mistaken policy to obstruct the flow of profits upon which the public revenue is now largely based in the form of income taxation."

BUSINESS PROFITS TAX

(Quebec Telegraph, Feb. 13, 1920)

There is considerable diversity of opinion in regard to the desirability of renewing the Business Profits Tax, and for this reason the coming budget at Ottawa is somewhat anxiously awaited. On the one hand, there are those of the Premier Drury school of politics, who would like to see all taxes paid by the "plutocrats," as he calls them. The opposition to the business profits tax is largely based upon the fact that it applies only to concerns employing more than a specified capital, permitting concerns of smaller capitalization to escape. Then, again, it applies only to certain kinds of industrial undertakings—agricultural enterprise, for example, being exempt. Large professional incomes also escape, while the business man, who takes a risk and succeeds, is taxed according to his success; while the professional man, who takes no risk, escapes everything but the income tax. Then, again, if the manufacturer has a bad year, he must bear the loss himself. On the other hand, if the following year is a good one, the Government takes the excess profit, refusing to allow any portion of it to be employed in evening up on the loss previously sustained. In illustration of these claims, a number of instances are given by some of our contemporaries. For instance, there is the case of a shoe factory which had offers of orders far in excess of the company's capacity. Early in 1919 full preparations were made for extension of the plant, including purchase of site, preparation of architects' plans, and arrangements for financing building. Then came the renewal of the Business Profits Tax, and immediately all extension was stopped. Another case is that of a leather tannery. The total output is easily sold, and export orders are being refused. The company is in a position to expand, and intends doing so as soon as the Business Profits Tax is definitely dropped—but not before. Manufacturers contend that they are justified in basing all plans for expansion of business upon the attitude of the Government in the matter of the Business Profits Tax, which has a tendency to drive Canadian capital to seek other countries for investment, and also to prevent foreign capital from coming to Canada. There is doubtless something to be said on both sides of this question.

THE PUBLIC PAYS

(Simcoe Reformer, Feb. 12, 1920)

A large part of the population imagines, says the New York *Sun*, that the one tax the public doesn't pay is the excess profits tax. It pays it all. It pays it several times over. Worst of all, because of the economic consequences of such a tax, it will go on paying it long after the Government ceases to collect it. The public pays the excess profits tax in the added prices passed along to the consumers by the industries and businesses assessed for the tax. The public pays more than the actual tax in the waste and squander to which such industries and businesses are encouraged by the excess profits measure. The public pays still more in the reckless management and demoralized working forces, which slow down production which, if it went beyond a certain point, would go into taxes. The public pays it again in the stronger and stronger demand, as expressed in currency inflation, upon a smaller and smaller supply under that slackened production induced by

the excess profits tax. And the living cost effects of this habitual inefficiency will continue for a long time. But millions of simple-minded citizens were never surer of anything than that they do not pay the profits taxes collected from richly-earning industries and businesses. They never were surer of anything than that if the excess profits taxes were taken off those opulent industries and businesses, other taxes wider and deeper, heavier and more heart-breaking, would be applied upon the people's aching backs.

BUSINESS PROFITS TAX

(Cobalt Nugget, Feb. 5, 1920)

The Business Profits Tax expired on the 31st of December last, and at the coming session of the Dominion Parliament there will in all probability be some changes made in the Act. At all events, it would seem to be only equitable that the needed revenue should be obtained in a manner that would bear more evenly upon the people. There is no reason why one class of citizen should bear a proportionately heavier burden of taxation than other classes in the same country.

The Government will have to provide ways and means for raising a much greater revenue in the years to come, and every fair-minded citizen will agree that this is necessary, but it is to be hoped that some method will be found to distribute the burden as equally as possible.

A case has been quoted of a member of a firm of manufacturers whose tax for 1918 was nearly four times that of his neighbor, enjoying the same income from a profession. It is cases of inequitable taxation such as this that are responsible for the development of criticism. Not that a business man objects to being taxed, but it is obviously unfair that his neighbor, receiving as great an income through some other source, should be allowed to get off practically scot-free from his financial responsibilities to the country.

Industry has already many handicaps, and the careful student knows that the life of the country now depends upon production, so that any further impediment would be a serious thing for the country as a whole.

THE BUSINESS PROFITS TAX

(Vancouver Sun, Feb. 10, 1920)

In the coming session of the Dominion House the Government and the country will come to grips with the taxation question. The problem of raising the large revenue which will be required in the next financial year is one to tax the ingenuity of the Finance Minister, and, perhaps, the patience of the taxpayer, to the utmost. Every kind of fiscal expedient will be canvassed, and to the discussions, in Parliament and outside it, every variety of interest and opinion will contribute.

To the nature and effects of the Business Profits Tax considerable attention is already being paid. In some quarters its repeal is demanded. It is described as inequitable, unwise and as an incentive to concealment of profits and overcapitalization. In war time, fiscal measures can be resorted to which cannot be justified or maintained in peace time, and there is no doubt that a strong case can be made out against the Business Profits Tax as a permanent fiscal instrument.

In the normal course, the profits of businesses will be distributed as dividends. The incomes of the individuals participating will thereby be increased. To tax profits before their distribution is, therefore, to alter the incidence of the income tax. The small shareholder ordinarily pays less income tax proportionately than the wealthy one, because his total income is smaller and the tax is steeply graduated. He is placed at a disadvantage when the dividends of both are taxed equally before distribution. And in all such cases there is an element of double taxation which is absent in regard to other forms of income not derived from dividends.

The known methods by which the Business Profits Tax is evaded will be increasingly resorted to, and will be supplemented by new expedients as the country gets further and further from war conditions. And it is difficult to discern why business profits should be subject to double taxation. This they must be, unless the Business Profits Tax is made simply a device for taxing incomes from business at the source. In that case the tax would be deducted from the amount of income tax payable by the individual shareholder or partner. But until that is done, there will be double taxation.

The only justification for the Business Profits Tax is the fear that excess profits will be wrung out of the people under existing economic conditions. That fear has some justification, though competition will inevitably destroy the ability to earn excessive profits, as normal business conditions return. The danger can be removed, however, by legislation controlling the purely financial operations of companies and corporations. The watering of stock, bonusing, and the creation of unnecessary contingency and reserve funds, for example, can be checked. Apart from the provision of proper reserves, all the profits of businesses ought to be distributed annually as dividends upon stocks and shares representing the real capitalization of the particular undertaking. When this course is pursued, the graduated income tax will do all that can justifiably be done by a Business Profits Tax.

This view of the problem should be fully considered by the House of Commons when the question of continuing or abolishing the Business Profits Tax comes before it. But its abolition, which is the logical outcome of the argument, must be accompanied by legislation to ensure the distribution of all profits over and above those reasonably required to ensure the stability of the business concerned by means of adequate reserves.

BUSINESS PROFITS TAX

(Montreal Gazette, Jan. 22, 1920)

The Business Profits Tax does not run beyond the year recently ended, unless Parliament revises the impost, and this method of taxation will, presumably, engage the serious consideration of the Finance Minister. The obligations of the Federal Government do not permit of reduction of taxation. Every dollar turned into the treasury is required to discharge debts due annually, and the people of Canada will be lucky if they escape further taxation to make ends meet. The problem confronting the Finance Minister is, however, not merely one of raising adequate revenue, but equally important is the question how to raise it. Before the war receipts from customs and excise duties, supplemented by revenue from the post office and public works, sufficed to meet expenditure with a frequent balance to the good; but the immense debt created by war activities, and the very considerable enlargement of staffs in Ottawa, have made necessary new taxation. In seeking sources of revenue the Government, as all governments do, resorted to an income tax, which people bear more or less contentedly, and also to a Business Profits Tax, and it is in respect of the perpetuation of the latter that controversy arises.

Business Profits Tax is not a wise tax. It may be justified as an emergency measure, but should not be carried into peace times. That is the opinion of respected critics. The United States is about to abolish the impost, and in matters of business the Americans are not slacking. The late Finance Minister, Sir Thomas White, regarded the tax with misgiving, as his remarks in his last Budget speech clearly showed. "Our business profits taxation," he said, "unless repealed as soon as war conditions terminate, must have an adverse influence upon the investment of money in business enterprise in Canada. Within bounds, such a policy is not open to criticism, but, carried beyond a reasonable point, it can only defeat its purpose, with consequences detrimental to capital, labor, and the community, as a whole." The conclusive objection to a Business Profits Tax is that it smothers business, capital is discouraged, enterprise is checked, and a premium is given to the divergence of profits to other ends than the public revenue. Mr. W. B. Colver, a United States Trade Commissioner, had this to say of the tax in a recent address to the Wholesale Dry Goods Association of that country:

"The Excess Profits Tax is passed on and multiplied until about four or five dollars is taken out of your pocket, my pocket and the pocket of the man on the street for every dollar that finally gets to the public treasury. The tax is difficult and cumbersome to collect, and bears inequitably upon different concerns of the same size and profitableness. As a matter of fact, it is a bonus for inflated capitalization and a penalty on conservative capitalization. It should be repealed at the earliest possible moment, and its repeal, I am certain, will result in an almost immediate lowering of the whole unhealthy price structure, which is

a burden alike to every citizen, whether he be consumer, merchandizer, producer or taxpayer."

The fault of a Business Profits Tax is that it impedes business, interrupts the flow and employment of capital, operates to dry up the source whence it is derived. The Government must have revenue, to obtain which it should encourage the use of capital and assist the enlargement of business—not quench either at their source. An income tax is proper, and is not a new thing. From the profits of business income will be produced, upon which taxes can be levied, and it seems a mistaken policy to obstruct the flow of profits upon which the public revenue is now largely based in the form of income taxation.

HIGH PRICES AND TAXES

(Charlottetown Guardian, Feb. 12, 1920)

Many and diverse are the views being expressed regarding the fall in the rate of exchange and on the high cost of living. When all is said and repeated, there is but one single explanation and one single remedy. For nearly five years Britain and the British Empire have been living on borrowed money—money that was used, not for production, but for destruction. To replace this destroyed capital, the gold standard was temporarily removed and a paper currency substituted. This was not done by legal enactment, but the Government permitted a larger percentage of paper circulation than authorized by the respective Bank Acts.

The money thus borrowed and expended must be made good, and the only way to replace it is by increasing production and selling the surplus to foreign nations. From the surplus produced revenue may be derived, in the form of taxation, for the maintenance of government. The first step towards the re-establishment of the gold standard and a sound rate of exchange is the curtailment of Government expenditure and the making of Government revenue and expenditure meet. The distribution of Government funds in the form of bureaus, unemployment relief and such like, tends to enhance the difficulties of the situation. Money given for doing nothing, or next to nothing, is the worst form of economics. Only productive expenditure helps a nation, and not until we get back to the pre-war state of every man being supposed to earn his living by the sweat of his brow or the genius of his mind, can we hope to re-establish finances on a sound basis and reduce the high cost of living.

In the stress and strain of war recourse has been had to the taxation of capital, and by capital we mean the money invested in business. This has taken the form of excess profits tax, and now "taxation that falls on the income from capital tends to check both the accumulation and the employment of capital. Of course, under certain conditions (such as prevailed in some, and perhaps most, industries in the present war), there may be large elements due to partial monopoly or exceptional demand. There may be what economists call quasi-rents, and, as Adam Smith observed, the gains of monopolists, whenever they can be come at, are, of all subjects, the most proper for taxation."

But if the special taxation strikes at the fair reward of enterprise and management, then both the amount and the productiveness of the national capital are injured. A similar argument applies to labor, but as the tendency is to make labor tax free, this may not be taken into consideration—except to note that the taxation on capital will indirectly affect the wages of labor and so far tend to lessen the productive power. It is the duty, therefore, of the Government to remove as speedily as possible restraints to production, and to begin to economize, in order to make revenue and expenditure meet; for thereby will the first step be taken towards stabilizing exchange and reducing the high cost of living.

THE PROFITS TAX

(Quebec Le Soleil, Feb. 19, 1920, translated)

We are wondering at the present time if the profits tax should be abolished or maintained, and the partisans of both opinions bring strong arguments to the discussion.

Those who wish the tax maintained show us the disastrous condition of our finances and the country's pressing need for revenue. They hold that if this tax were abolished, millions, becoming more and more necessary to the country, would be lost; and the partisans of the tax also wish that the public treasury benefit from the profits realized by the large industries; it is a contribution by the *nouveaux riches* to the work of improving our country's finances.

On the other hand, those who wish the tax abolished claim that it is prejudicial to industry; that it checks the investment of capital at home; and, finally, that in many cases it is illusory.

As we see, there are very good reasons on both sides.

In the ordinary course of things, it seems to us that we would favor the abolition of the tax, for we have had occasion to ascertain ourselves that it does not benefit the public treasury, because industrial promoters, in large numbers, have found means of avoiding it; because it can in reality injure industry and prevent foreign capital from coming our way.

It is an open secret that there are a number of industries with small capital which this tax does not reach. Slander goes so far as to say that some large industrial concerns have succeeded in avoiding it by forming sub-companies with limited capital. From this source, then, there is little to be gained from the tax in the way of improving our finances.

Moreover, it checks industrial expansion. It is affirmed that there is only one way by which Canada can free herself more and more from her obligations and establish normal exchange conditions, namely, by intensive production. Now, in order to do this, the number of factories must be increased; more factories, however, require considerable expenditure, for materials and labor are very dear, and what will it be when there is a profits tax to pay besides? Thus it is better to be content with what we have, and let fate do the rest.

We must rather find some means to give a fresh impulse to our industries; this would be attained by the attraction of foreign capital, but it is to be feared that capital will not come where a tax awaits it.

"We should therefore," say the opponents of the tax, "abolish it, because in many cases it is not paid, because it will harm our industrial expansion, and because it will discourage capital."

"But," will retort those in favor of the tax, "where will you get the revenue which this tax brought in?"

"Well," is the reply, "we will get it from the big incomes of individuals and from the *nouveaux riches*."

"At the present time it is a surprising thing that the small taxpayer, the small salaried man, for $2,000 is a small salary now, cannot escape the income tax, and the big millionaires do.

"The difference is that the small taxpayer has no means of escaping it, while the wealthy man succeeds in this by investing his money in industry. Now, if it has been a bad year, the Government gets nothing from the industry which has benefited by this capital, and then there are always ways of drawing up a balance sheet which will not show excessive profits; there is the item of depreciation and the increase in the cost of labor; there are several ways, and the fact is that industries get off easily.

"But the individual must declare his annual income accurately, and it is he who will have to pay."

Le Soleil is very much interested in this debate, and the coming session will undoubtedly see it under discussion in Parliament.

INCOME AND PROFITS TAXES

(Ottawa Journal, Dec. 4, 1919)

President Wilson, in his message to the United States Congress, makes a reference to taxes on incomes and business profits which is likely to arouse conflicting feelings. He thinks that the war scale of these taxes in the United States, which has been high, is unnecessarily and unwisely high now that peace conditions are restored; and he suggests lower rates as a matter of commercial and industrial wisdom. This view will be welcome to people who pay much of such taxes, and objectionable to people who pay little or nothing of them, and think that "the plutocrats," as Premier Drury calls them, should be "soaked" to the limit.

President Wilson may be right or wrong, but we have the idea that he is only half right at best. A sharp distinction exists between an income tax and a profits tax as regards effect upon the welfare of the community. President Wilson ought not to mix up the two in either a joint

(*Continued on page* 128)

Works Councils in the United States

An Illuminating Report on the Organization of These Councils, with Results Achieved to Date—Two Main Types Have Been Organized—Conclusions Reached Set Forth Concisely in a Carefully Prepared Summary

By J. T. STIRRETT
General Secretary, C.M.A., Toronto

The National Industrial Conference Board of the United States has issued a report on "Works Councils in the United States." (Research Report No. 21). INDUSTRIAL CANADA has made an arrangement with the Board to republish the following summary of this valuable report. Members who wish to secure a complete copy may do so on application to the National Industrial Conference Board, 15 Beacon Street, Boston, Mass. Price of the report is $1.50.

BEFORE proceeding with the study of this report, it is advisable to recall the fact that the subject of Industrial Councils was discussed very fully at the National Industrial Conference held in Ottawa, September 15-20, 1919. A special committee of the Conference composed of representatives of employers, employees, and the public, was appointed to bring in a report on this subject. The members of the committee were unanimous on their finding, and submitted the following report, which was also adopted unanimously by the Conference:—

"Your committee is of the opinion that there is urgent necessity for greater co-operation between employer and employee. We believe that this co-operation can be furthered by the establishment of Joint Industrial Councils. Your committee does not believe it is wise or expedient to recommend any set plan for such councils.

"We therefore, recommend that a Bureau should be established by the Department of Labor of the Federal Government to gather data and furnish information whenever requested by employers and employees or organizations of employers or employees, that whenever it is desired to voluntarily establish such councils, the fullest assistance should be given by the Bureau."

Definition of Works Councils

In the introduction to the report, "Works Councils in the United States," the Works Council is described as "a form of industrial organization, under which the employees of an individual establishment, through representatives chosen by and from among themselves, share collectively in the adjustment of employment conditions in that establishment. The Works Council is intended as one means of satisfying the desire of the worker for a share in the adjustment of his work conditions; as a means of lessening labor difficulties, of allaying industrial unrest, of increasing productive efficiency; and as an opportunity for informing employees on production, technical and economic questions. It provides, in the individual establishment, an organized form of contact between the employer and his employees."

The report is conservative in its character. It finds that as a rule, the establishment of Works Councils has resulted in the election of conservative and intelligent representatives of employees. It also states that, on the whole, the Works Council has promoted a better spirit between management and men. It point out, however, that the Works Council is, in itself, not a cure for industrial troubles, but simply provides one kind of machinery for the adjustment of problems.

The report draws a very clear indication in regard to collective bargaining, as follows:—

"Under a plan of employee representation, questions previously settled between the employer and his employees individually are handled by representatives of the employees collectively, and, moreover, on a systematic basis. Recognition of the principle of collective dealing by the employees of an individual establishment with their employer forms the very basis of the Works Council. Such collective dealing is, however, distinct from 'collective bargaining' in the sense of collective dealing with labor unions as organizations."

This means that the individual plant is the unit for negotiation between employer and employees.

Works Councils and Trade Unions

In regard to the relationship between the Works Council and trade unions the report says:—

"The Works Council, however, is not in its essence a substitute or an alternative for labor union organization. In recognition of this fact, some notable plans of employee representation expressly provide that employees shall not be discriminated against because of labor union membership. While the Works Council tends to restrict the activity of the labor union in matters purely local to the individual establishment, the union may still be potent in settling problems common to the entire craft, industry or locality."

In dealing with the distribution of Works Councils with respect to the extent of trade unionism in plants where Works Councils have been organized, the report says:—

"Of 81 establishments from which information was secured on this point, 71 reported that they maintained 'open shops,' while in three others one or more departments were conducted on the 'open shop' basis. Two were 'closed non-union shops' and another was nominally a 'closed non-union shop.' A 'closed shop' is also maintained by the 'company union' or a public service company. Two firms stated that while their establishments are nominally 'open shops,' they are practically 'closed union shops'; one is a 'preferential union shop.'

"Not all of the reports received give adequate information on the extent to which shops are unionized. Of those giving definite information, 10 reported that 90 p.c. or more of their employees belong to trade unions, three put the figures at 80 to 90 p.c., three at 70 to 80 p.c., two at 60 to 70 p.c., and eight at 50 to 60 p.c.; four reported 20 to 30 p.c. of trade union members among their employees, and 22 reported less than 10 p.c. Eight reported that they had no union members among their employees.

"Of the 26 establishments in which 50 p.c. or more of the workers were union members, 22 were engaged either in shipbuilding or in some branch of the metal trades. Of the 10 establishments unionized 90 p.c. or more, all but two were in these industries."

One Fundamental Feature

Two main types of Works Councils have been organized in the United States up-to-date, although in one fundamental feature the organization of all Works Councils is the same, viz.: Each is a representative body chosen by and from among the employees of an individual establishment. The various kinds of Works Councils, however, fall into two main



All Departments Are Represented

Works Council at Hamilton Works of International Harvester Company

divisions, first, the Government type, and second, the committee type.

The government type follows the pattern of the United States Government, and provides for a Cabinet, Senate, and House of Representatives. This is often referred to as the "Industrial Democracy Plan." The Cabinet consists of the membership of the higher executives of the plant. The Senate is made up of foremen. The House of Representatives consists of the elected representatives of the employees. In one factory the Senate, as well as the House of Representatives, is composed of representatives elected by the employees.

The committee type follows the ordinary committee form of organization, sometimes being a single committee, sometimes a number of committees.

It is apparent that the Works Council is still in the experimental stage, and in comparison with the number of plants in the United States, the Works Councils in operation represent a small percentage of the total factories of the country.

The conclusions reached in this lengthy report are very concisely set forth in a general summary, which is printed in full as follows:—

VII—General Summary

"The facts with reference to Works Councils in the United States, as set forth in the preceding portions of this report, are summarized in this chapter. The evidence assembled in the course of the investigation also suggests certain conclusions with regard to specific features of this industrial development. The latter, which are based upon impartial judgment of the facts disclosed by the investigation, are here presented without prejudice as to the desirability or undesirability of establishing Works Councils.

"Works Councils are a relatively recent development in industrial organization. Although proceeding from forces long active—a desire on the part of the employer to establish a more intimate contact with his employees, on the one hand, and a desire on the part of the workers for effective representation of their interests, on the other—the first known example of a Works Council in the United States dates back only to 1904. Up to January, 1918, only 29 such organizations had been formed, so that practically all existing Works Councils were established during a period of 18 months. Their rapid increase in number during this period is to be attributed mainly to the activity of the National War Labor Board and the Shipbuilding Labor Adjustment Board and to abnormal war-time conditions.

"The number of Works Councils disclosed by this report —approximately 225 in 176 companies—is, of course, relatively small compared with the total number of industrial establishments in the United States. Their development, while significant, must therefore be regarded as in an experimental stage.

Most Councils Among Metal Trades

"The largest number of these Works Councils are found in the various branches of the metal trades and the next largest in the shipbuilding industry. Practically all of them are located in the states east of the Mississippi River. They exist under a wide variety of conditions. While often found in small establishments, by far the greater number of them are in large establishments employing a high proportion of skilled and of English-speaking workers. With respect to the degree of unionization among employees, establishments with Works Councils are about evenly divided between those in which a majority of the employees are unionized and those in which only a small proportion or none are union members. Practically all establishments having Works Councils are 'open shops.'

"By far the majority of Works Councils are of the 'committee' type, as distinguished from the 'governmental' type modelled after our system of Federal Government. Of the total of 225 Works Councils considered in this report, only eight are of the latter type.

"While a choice between the 'governmental' and the 'committee' types of organization is largely a matter of personal

preference, experience indicates that the 'committee' type in general is the more desirable because of its greater flexibility. In large establishments, in particular, the 'governmental' type has the disadvantage that in order to be properly representative of the employees it must necessarily be so large as to be unwieldy. Also all questions, however trivial or local, arising in any part of the plant must be referred to the House or Senate, and thereby become the concern of the whole plant. These difficulties are avoidable in the 'committee' type of organization, since it permits of the development of divisional committees in the smaller units of the plant.

Advantages of the Joint Form

"As between the separate and joint form of Works Council, the latter appears to have some advantages. The Joint Works Council, composed of an equal number of representatives of the employees and of the management, tends to develop in both a sense of their mutuality of interest. As a result, its activities are more likely to be of a co-operative and constructive nature. Obviously, agreement between the parties should be facilitated by reason of the fact that the representatives of both, sitting as members of the same body, hear the full facts concerning matters under discussion before they are required to take a position. A special provision authorizing either set of representatives to meet separately may, however, be desirable, since an opportunity for either group of representatives to talk over a matter among themselves, following joint discussion, may often facilitate a settlement. Moreover, such a provision preserves the separate entity of the two parties where their interests may be in conflict.

"With respect to their constitutions, the Works Councils reported upon are about evenly divided between single Works Councils and Works Councils based upon divisional committees. The former are found mainly in small plants; where single Councils exist in large plants, the establishment is generally subdivided into voting divisions for the purpose of electing the members. Works Councils of the second class, that is, those which comprise not only a general committee for the plant, but also smaller representative units, such as departmental, divisional, shop or craft committees, are characteristic, by contrast, of relatively large establishments.

"The latter form of organization has been found especially advantageous in large establishments, where, in order that all interests among the employees may be properly represented, a single Works Council would be too large for effective work. In this connection it is to be noted that Works Councils are generally effective in actual operation to the extent that they embrace the various elements among the employees.

"It has been found necessary to determine for each establishment individually the divisions in which Councils are to be set up, the only basis capable of general application being that such divisions should be natural units of the plant. The working direction, the number of employees, their occupation, their proximity at work, and other considerations have to be taken into account.

"The employee members of the divisional committees are chosen, of course, by the employees in their respective divisions. The employee members of the General Works Council may be chosen by the employees of the plant as a whole or by the divisional committees, or they may be selected from the divisional committees.

The Management's Representation

"While foremen, rate-fixers, division superintendents, and other minor executives may represent the management on the divisional committees, the management's representatives on the General Works Council are ordinarily high executives of the establishment.

"In their procedure practically all Works Council plans prescribe that an adjustment be attempted with the foremen,

(*Continued on page* 103)



The Round Table Idea in Operation

Works Council of the Massey-Harris Co., Limited, Toronto, in session

More Information Needed on Export Trade

While a Great Deal of Valuable Data Has Already Been Compiled there is Urgent Need for More—Members Who Have Not Already Furnished Particulars Are Urged to Fill in the Questionnaire Below

By ALEX. MARSHALL

Manager, Commercial Intelligence Department, C.M.A.

ONE of the most important functions of the Commercial Intelligence Department of the Association in the past has been the interviewing of an almost constant stream of visitors from Great Britain, the Overseas Dominions, India, France, Belgium, Scandinavian countries, the Balkans, Greece, South America, the West Indies, and other countries. Many of these visitors are import commission agents, merchants and import contractors, generally coming well introduced and bearing first-class references as to ability, integrity and responsibility. Besides these well equipped and well established business men of countries other than our own we have frequent calls from successful Canadian salesmen, returned officers and others, who have some adaptability for and, in some cases, past success in selling various commodities in different export markets.

It has been our privilege and pleasure to put many of these men in touch with Canadian manufacturers who were known to be interested in export trade, as well as to assist reputable Canadian export commission houses in seeking business from our members.

After consultation with many disinterested authorities on export trade, and at the request of the Commercial Intelligence Committee, this article has been prepared to get the serious consideration of the members of the Association as to the desirability of carrying out this work in a more thorough and more systematic way than has heretofore been possible with the information at our disposal.

Naturally, no attempt is ever made to interfere in any way with arrangements already made by our members for their representation or other methods of sale of their goods in export markets, and such an outcome would be too deplorable to consider.

Through the close connection of the Commercial Intelligence Deartment with the compiling not only of the information regarding the products of Canadian factories and its publication in the "Canadian Trade Index," but also with the confidential information submitted on the same schedule, and compiled from answers to circulars, etc., the Department's work has been facilitated to a considerable degree. Nevertheless, instances are not unknown where your officers have been reduced to almost sheer guesswork in supplying the names of members to first-class people who have called on us for assistance, and who present opportunities much too valuable to be overlooked, and yet who, if misdirected through lack of information, may cause some annoyance to themselves and to our members, and possibly bring down on innocent, if persevering and enthusiastic heads, the anathemas of those annoyed.

There are so many different ways of doing export business dependent on the needs of a particular business or the policy or convenience of the company concerned that some further tabulation seems essential if success more complete than in the past is to attend our joint efforts.

The members of this Association probably need little reassurance that the staff in its employ is vitally interested

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1. In countries where your export sales are not already arranged for, do you desire sales representation?.....

.....

2. In what countries do you wish such representation?.....

3. What line of goods?.....

4. In what countries are you free to do business with outright purchasers without paying export commission?.....

.....

5. What form of sales representation suits your business best? (Indicate answer by a cross.)

   (*a*) Direct sales by your own salesman?.....

   (*b*) Sole agents on commission in different countries?.....

   (*c*) Sole agents on commission in different sections of countries? .....

   (*d*) Sole agencies with merchants in different sections?.....

   (*e*) Canadian Export Commission Houses?.....

   (*f*) Canadian reserve officers with European business connections? .....

   (*g*) Canadian salesmen with export connections or experiences? .....

   (*h*) London International Import Contractors?.....

   (*i*) Any other form of representation?.....

   (Please state it.)

For general information:

   (*a*) Are you interested in the formation of syndicates for export purposes, composed of manufacturers making the same line? .....

   (*b*) Would you value the receipt, in printed form, of information about good methods of developing and handling export trade? .....

in guarding the interests of individual members as well as those of the Association, and that no information of any character will be divulged in such a form that it may inure to their disadvantage.

In order to provide more efficient service along the lines indicated above, would members be prepared to give us on a confidential basis such information as the answers to the questions enumerated below would furnish?

We have endeavored to form the questions so as to render the answering of them a matter of ease for the man in your company who looks after the export business. At the same time comprehensive replies from all members interested in export would be of untold value to your Commercial Intelligence Department, would save much time and heartburning, and provide an efficient service that would ultimately prove valuable to members of the Association, particularly when supplemented by our Commercial Report service on foreign firms, which is also supplied free to members.

If you are prepared now to agree with this viewpoint, would you give instructions to have the questions answered, and that section of the page clipped and returned to us. Failing that, we should be glad to have any expression of opinion or further suggestions on the matter that the spirit of co-operation, which we know exists, prompts you to send to the Commercial Intelligence Department, Canadian Manufacturers Association, 1404 Traders Bank Bldg., Toronto, Ont.

Conditions in German Industries

Leipzig Fair of 1919 Gave Good Indication of How German Industry Stands—What the Germans Propose to do to Regain Lost Markets

(Commercial Intelligence Department)

IN the days before the war the National Industrial Fair held at Leipzig, Germany, usually afforded a good index of the standing as well as the growth and progress of German industries. Naturally enough, little was heard of it during the war, but reports on the activities of the 1919 Fair are available which give a reliable account not only of the Fair itself, but of the condition of the various industries and the prospective ability of Germany to compete for export trade.

The exhibitors at the 1919 Fair numbered approximately 10,000, mostly German. The attendance mark reached 118,000, or 20 per cent. more than in any previous year. This Fair must not be confused with the sort of Fair usually held in Canada. It is distinctly a buyers' and sellers' Fair where contracts are made in many cases for annual supplies of raw materials and manufactured goods.

Representative exhibitors in conversation with visitors left the distinct impression that many branches of German industry are verging on failure, due, in some degree, to the loss of export trade, but largely to the lack of supplies of coal and other necessary raw materials, many of which ordinarily come from other countries.

The German manufacturers are therefore planning to concentrate their export energies on modern mechanical contrivances and attractive novelties which they calculate will force their way into markets more readily than more staple commodities. Strong efforts are also being made to arrange for the development of their export trade through American and neutral channels.

Technical Section

From the above viewpoint, the most extensive exhibit was that section showing electrical devices, novelties, improved machines, and many types of new machine tools. Owing to maintenance of adequate supplies of raw materials in the metal working and electrical industries during the war, these industries are much better supplied than others, and are well prepared actively to re-enter export trade since the domestic demand for these products is much reduced. Foreign trade was the secret of Germany's success in the mechanical engineering trade, and it would appear that they occupy a strong position to reach competitive markets, particularly in those highly developed lines in which the labor cost is great in proportion to the cost of raw materials, provided always that they can overcome exchange disadvantages. It was noted in connection with the exhibits that the use of brass was avoided wherever possible and pressed steel substituted.

The following details regarding the technical section may be of interest:—

(1) Patents. Considerable quantities of specialized machinery was on view, and the Germans seem disposed to sell the covering patents for other countries to foreign manufacturers.

(2) Machine tool deliveries can in most cases be made from stock.

(3) A high proportion of the goods sold during the last six months has been for export.

(4) The prices are approximately 200-400 per cent. higher than for similar goods before the war.

(5) Considerable business has been developed with Holland, Norway, Sweden, Spain, and North and South America, but international banking arrangements in the unoccupied territories have not yet been re-established with England.

(6) The importer must make his own arrangements as to entry. The Germans handle the export regulations and shipping. Cash, in Germany, against invoices usually forwarded before shipment appears to be the ruling method of payment.

(7) The chief limiting factor in production is the shortage of coal.

Paper and Paper Manufactures

The exhibits displayed in this section were not at all varied in character. The principal articles of use as ordinary commodities were:—

(1) Stationery; the ordinary German quality of flat paper. No Manilla paper was shown.

(2) Art prints in wide variety comprising pictures, calendars, post cards, blotting pads, and many styles of decorative printing. Good colour work was the feature of these exhibits.

Owing to the scarcity of raw stock, many plants are closed down. The larger concerns, however, who are keeping on most of their workmen are producing about one-third of their normal maximum output.

The better grades of paper and stationery are simply not being produced. A considerable part of the low grade output has gone to South America, but the total orders in sight for export and domestic demand combined only reach about 33 per cent. of the possible output.

Similar accounts of the state of other German industries will be given in future issues of INDUSTRIAL CANADA.



How Exhibitions Attract the Public

Here are to be seen 1700 Automobiles parked in the grounds of the Great Eastern Exhibition at Sherbrooke

Our Exhibitions—A Neglected Opportunity

Apart from a Few of the Larger Fairs in the East, Our Exhibitions Are Not Being Used for the Display of Canadian Manufactured Goods as They Very Well Might Be—Manufacturers Should Take Action

By J. M. MACINTOSH

Manager, Trade Section Department, C.M.A.

CANADIAN manufactured goods are conspicuous by their absence in the great majority of the fairs and exhibitions held throughout the Dominion in the summer and fall months. There may be reasons, on account of the number of these fairs and their occurrence in all parts of the country at about the same time, for this condition, but even so, it is apparent that a golden opportunity is being lost. Some means should be worked out, particularly at the present juncture, when the made-in-Canada campaign is again being vigorously prosecuted, for placing exhibits in as many of these fairs as possible, and thus bringing to the attention of the people the merits and wide variety of Canadian manufactured goods.

The Trade Sections Department of the Association has been collecting information about exhibitions and ascertaining the facilities provided for the display of Canadian products. Its report on these fairs throws a good deal of light on the present situation and prospects. Dealing first with the Western fairs, the report reads,—

"A series of well equipped fairs are held in the Prairie Provinces and British Columbia each year, the more important being Brandon, Regina, Saskatoon, Prince Albert, Edmonton, Calgary, New Westminster, and Vancouver.

The Exhibition at Brandon

"Brandon provides buildings for the display of mercantile, industrial, motor, and a large outside space for farm machinery exhibits. They contemplate erecting another display building to meet the demand for inside space. The mercantile exhibits are from leading merchants in the province, and they include imported goods from Great Britain and the United States. In manufactures, such as farm machinery, implements, and automobiles, the principal Canadian manufacturers are represented but American manufacturers predominate. The directors are said to be desirous of encouraging exhibits of Canadian manufactured goods and are prepared to do their part in inducing Canadian firms to take advantage of 'the excellent opportunity the exhibition provides. If Canadian exhibits were equal to those in the United States, there would be no doubt as to which would get the business. Orders taken at this exhibition represent hundreds of thousands of dollars.

"Regina advises that the most important display of manufactured goods is in the implement section. Most of the exhibitors in this department prefer the out-of-doors location, but in addition to that they have an implement building with 30,000 feet of floor space. The space available is fully taken up and some demands could not be met. The Secretary reports that about nine-tenths of the manufactured goods exhibited were from the United States. The largest Canadian implement firms gave up their space last year and left the field to their American competitors.

Prince Albert Has Large Hall

"Prince Albert reports that they have a large exhibition hall for the display of manufactured goods. At the present time, there are very few manufacturers taking advantage of the space, but local retail merchants are beginning to appreciate the fact that the space is available for them. Outside that, about fifty per cent. of the products exhibited are of Canadian manufacture, the balance being of United States and British origin. 15,800 people attended the fair last year.

"Edmonton reports that they have a large manufacturers' building and in addition to that, have tent space for outside exhibits. They also have a transportation building used for exhibits of automobiles. Outside of those in the locality, manufacturers are slow to take advantage of this method of placing their wares before the public, although exhibits of farm machinery have grown so rapidly that it was found necessary to provide three times the space formerly allotted for this class of exhibit. American manufacturers are said to be much quicker to take advantage of exhibition advertising than Canadian firms.

Calgary Provides Facilities

"Calgary reports that they provide facilities for exhibits of manufactured goods in three buildings. The space avail-

ible is taken advantage of to the limit of the capacity each year. The attendance at the exhibition this year was 127,248, and most of the exhibitors are said to be Canadians.

"New Westminster reports to the effect that they have an industrial building, but that they could not provide sufficient room to take care of one-half of the applications for space. The manufactured goods exhibited are said to be mostly Canadian.

Vancouver's Beautiful Grounds

"Vancouver reports that they have the most beautifully situated grounds in Canada, and that they have the best buildings outside of Toronto. The manufacturers' building is slightly over an acre in area. One half of the building is allotted for made-in-British Columbia goods; the other half for other manufacturers. Amongst these other manufactures fifty per cent. are said to be made in Canada, and nearly all the rest are made in the United States, with a fair sprinkling of European-made goods. The forestry building displays mining machinery and products. About eighty per cent. are made in Canada and the balance in the U.S.A. In the automobile exhibit about fifty per cent. is made in Canada and the balance in the United States. This is said to be the largest fair on the Pacific Coast.

"The information contained in this report in respect to these Western fairs has been obtained as the result of enquiries emanating from this Association. The secretaries have suggested that they will welcome co-operation from the Association in any effort that may be made to induce Canadian manufacturers to make greater use of these opportunities for showing their goods to the Canadian public."

The report of the Trade Section Department also deals with the exhibitions and fairs held in Eastern Canada.

Exhibits at Canadian National

"The Canadian National Exhibition, held in Toronto, is so well known that elaboration is unnecessary. From enquiries and personal observations it is estimated that the exhibits in the industrial building and machinery hall are approximately ninety per cent. Canadian. The manufacturers' building contains the exhibits of some retailers, jobbers, and importers, but it may be said that the exhibitors themselves are practically all Canadians. The manufacturers' annex consists more of specialties, many of American origin. In agricultural implements, Canadians are well represented. The demand for space is said to be greater than the supply and, taking into consideration the distribution of exhibits as between domestic and foreign countries in the proportions referred to, it appears that Canadian manufacturers are taking very satisfactory advantage of this opportunity of displaying their products. It will be understood that the directors desire to give encouragement to those exhibits which will be most attractive to the public eye. If more Canadians apply for space and the character of their exhibits is so improved as to make them more attractive than foreign exhibits, it would eventually result in the exclusion of foreign products. The fact that these foreign exhibits may be viewed by an attendance which aggregates upwards of a million suggests the value of the advertising these foreign products obtain through this exhibition.

Large Provincial Fairs

"Immediately following the Toronto exhibition, large provincial fairs of one week's duration are held in Ottawa and London. Both these fairs open on the same Saturday that Toronto closes. The Toronto management will not allow any exhibits to be removed until after ten o'clock on the evening of the last day and in consequence many exhibits which might be sent on to either the Ottawa or London fairs are held up and not shown in either of the latter fairs. Both these latter exhibitions have accommodation for such exhibits and while creditable displays are made they might be improved and a greater variety shown if there was not this overlapping in the dates.

"In addition to these large provincial fairs 217 fairs are held in the Province of Ontario in the months of September and October. These usually are for two days. The advertising to be gained from sending exhibits of goods for which there is a demand amongst the rural population to these fairs would be invaluable. These fairs might be divided into about six circuits. Each of these circuits might be taken care of by one set of samples and one representative.

"The Great Eastern Exhibition of Sherbrooke, has a building with 40,000 square feet of floor space and is generally full, although, it is said that some exhibits could be replaced to advantage. An examination of the list of exhibitors indicates a large proportion to be of local origin, some from Montreal, and a few from Ontario."

Fire did several thousand dollars damage to the match factory of the E. B. Eddy Co. at Hull on the night of February 17. The fire originated in what is known as the "box bins," on the top floor, where several thousands of boxes are stored.





The People are in a Receptive Mood

These immense crowds at the Edmonton Exhibition have come from near and far to be entertained and are ready to be interested in anything

Blue-Sky Law---Is It Desirable Legislation?

How This Type of Law Originated and How It Has Worked Out in Practice—Views of Investigators—Remedy for Existing Evils to be Found in Provisions of Company Acts

By THOMAS MULVEY, K.C.
Under Secretary of State

THE subject for discussion is Blue-Sky Law. I think that the present is an opportune moment for discussing this subject. A bill for this purpose was introduced at the Local Legislature last session, and I understand that it is to be pressed again,—at least so it is stated in the newspapers, —it is to be pressed to enactment at this coming session. If the subject is to be discussed this is an opportune time for doing so, and I think moreover that the Manufacturers' Association as a body should consider such a question as this. The Manufacturers' Association is one of the most influential bodies of business men in the country, and this I think I can show is a matter which affects every business man. And even if it does not affect the business man individually, any question which affects the whole business community is of interest to the business man and manufacturer. It is for that reason I am glad to have the opportunity of discussing it before the Manufacturers' Association.

Measure Should be Discussed

Now this of course is a debatable question, and, while I have fairly express views upon the subject, all I desire is that a discussion of the subject should be carried on so that if it is enacted people will know the effect of the terms of the measure and how it will affect the general business community. In legislation of this kind it is beneficial to the whole community, at any rate, to have measures of this kind fully discussed. I appreciate my own personal position in appearing before you. A civil servant is not supposed to have any views. I quite agree he has no right to criticize any Government, but nevertheless I think when a matter is not one of acute partisan politics that an official who has views upon the subject which he thinks are in the business interests and interests of the community should have an opportunity of expressing himself.

Now first I think we must consider what Blue Sky Law is. As a matter of fact the term "Blue Sky" was not first of all applied to the law. They had in Kansas what they called Blue-Sky merchants. The Blue-Sky merchant was a gentleman who would sell corner lots on the Blue-Sky and guarantee title in fee simple. In other words they were vendors of absolutely fictitious securities. Now, Kansas was a splendid stamping ground for these individuals. Kansas is one of the most productive states in the whole of the United States. It is a purely rural state. The largest city, Kansas City, and that is really an overflow from Kansas City, Missouri, is 100,000, and the next largest city is only about 70,000, while the whole state has a population of almost two million, not much less than the Province of Ontario. So that when the harvest was reaped by the farmers, the Blue-Sky merchant came in for his harvest in endeavoring to separate the farmer from his money.

The legislation started there about the year 1911. Mr. Dolley, who was the originator of the Kansas Blue-Sky Law, was a successful merchant and in his business he became associated with financial institutions and he was director of a savings bank. In the campaign of 1911 he took considerable interest in one of the parties, I don't remember which it was, but at any rate his party was successful, and on account of the activity he displayed during the campaign he was entitled to what we consider is equivalent to a portfolio in our Government. He was appointed Banking Commissioner. He undoubtedly was a progressive and enterprising gentleman, and he saw the evils, and undoubtedly they are evils, throughout the state in bond salesmen and corner lot salesmen and all classes of people like that, simply defrauding the people right and left. His first move on the subject was to arrange with all the bankers in the state that, when any of their customers were seeking to draw any fairly large sum from the bank, the bank manager would enquire what was to be done with the money, and if it was to be invested in any kind of security which was being peddled about, information of it was to be sent to the Banking Commissioner at Topeka, and then an enquiry was made and information sent back to the bank manager. Undoubtedly in that way a great many people were protected from bad investments and it certainly did do a lot of good. This induced Mr. Dolley to frame the Blue Sky Law which was introduced in the Legislature of Kansas in 1911.

Now I should next, I think, describe in a few words what the provisions of this Blue Sky Law are. The main provision of it is that no one can sell a security of any kind in the State of Kansas unless not only a prospectus but a general view of the nature of the business is submitted to the Banking Commissioner and he approves of it. In fact no company may be incorporated without the approval of the Banking Commissioner. So that it is necessary for a person incorporating any company whatever to disclose the nature of his enterprise, the method by which he proposes carrying it on and the means upon which he proposes to make that successful. It is then in the business discretion of the Banking Commissioner to say whether this company should be incorporated or not. The same applies to securities of companies issued outside of the state. They must disclose their method of doing business to the Banking Commissioner before they can sell any of the securities in the state. There a lot of other provisions, one of which I will refer to more particularly, and it is that every person who sells securities of any kind should have a license from the Banking Commissioner.

The Law in Principle and Practice

There are two methods of discussing this subject. One is on the question of principle to determine if possible whether this method infringes upon any well laid down principles of business or liberty or of morality, and the second is to determine whether, in view of the experience which we have had now for about eight years of the Blue Sky Law, it has accomplished what it purported to do.

There is no question but that Blue Sky Law is a direct interference with ordinary business. None of you gentlemen who perhaps want to reorganize your business and get in fresh capital could reincorporate your companies without disclosing a great deal of information which is personal,

* An address delivered before the Toronto Branch, C.M.A., Thursday, January 29, 1920.

rivate and belongs to yourself. In the next place it gives official such a control over the general business of the mmunity which may in certain cases develop into a crime. There are a lot of well laid down principles of liberty hich have grown up in the years of trouble, years of evolution, years of war, but at the present time we seem rone to throw them aside. I can illustrate my meaning by me recent comments in the newspapers about Temperance egislation. I don't want to criticize either Temperance or ie Ontario Temperance Act or anybody connected with it, nd it is likely that this remark had no origin whatever xcept in the fertile brain of the newspaper men. It was to ie effect that the quantity of liquor in a person's cellar ould be limited. Now, that I have no doubt was given out ithout any question whatever of really what it meant. It ok the people of England many centuries to arrive at the rinciple which we now adopt without question, that a man's ome is his castle, that no one has any right to say what he hall have in it so long as he obeys,—I was going to say, beys the law, that is not what I should say,—so long as he ves peaceably with his fellowman. So long as he does that is home is his castle and he may do what he likes. That rinciple of liberty which was I say wrought out after urmoil, trouble, bloodshed and everything else would be cast way entirely if a principle such as was enunciated should e introduced. It appears to me that Blue Sky Law is in he same class as Legislation of that kind. It is very difficult o point out so clearly as you can with respect to the liquor n the cellar how it infringes ordinary business methods, but t sticks out on the face of it that the freedom of business s interfered with. A man cannot deal with his property n the way he should without State intervention. On these rounds I submit that it is wrong in principle.

The Experience of Eight Years

Now, I would like to go into consideration to some extent f the methods adopted and how they have worked out in he last eight years. One of the first references is to a eport by Mr. Dolley, on the administration of the Blue-Sky aw in Kansas during the first couple of years, and this is aken verbatim from his report. I will refer not only to some f the statements which he makes here but I would like you lso to pay attention to the wording of this clause of the eport because it indicates a great deal of the character of he man who wrote it: "The Department succeeded in getting he last legislature to pass House Bill 906, commonly known s the Kansas 'Blue Sky' Law, providing for the regulation nd supervision of the sale of stocks, bonds, and other securties. This law, as you know, was something entirely new n the business world, but I am pleased to inform you that ve have worked the same out in a very nice shape and accomlished some wonderful results. I estimate that it has saved he people of this state at least six million dollars since its nactment. Between fourteen and fifteen hundred companies ave been investigated by this Department since the enactent of this law, and of this number less than one hundred ave been granted permits to sell their securities in Kansas. The law is rapidly gaining fame all over the civilized world, nd I believe that a large number of the states will adopt a imilar law at the coming sessions of their legislatures. I elieve that a movement has been started that will eventually esult in the regulation and supervision of all kinds of ompanies in the same manner as banks are now regulated nd supervised. There are a few minor amendments that hould be made to this law, which I will be pleased to ecommend to the legislature at the proper time."

I personally investigated the files of the Banking Commissioner at Topeka, and the statements contained in that report are not facts. Down to the first of April, 1913, permits were granted to 49 companies and refused to 62. That is what the files of the Department show. The balance of the applications were held for consideration. One of them that was held, as stated to me at Topeka, was a co-operative agricultural implement concern from Chicago which applied to Mr. Dolley for license. It was held because this was a very large concern and they didn't have an opportunity of fully investigating the business outlook which it had, so it was given a temporary permit and it immediately proceeded to sell I think about $700,000 worth of its securities in Kansas. It was questioned later on. Mr. Dolley asked for the reports so that he might really consider whether a license should be granted, but they refused to do it. They had sold all the securities they desired in Kansas and they backed out. They were in liquidation, I think, within six months and shown to be an absolute fraud.

The Law was not Adequate

Nobody can say that provisions of this kind do not work some good in some places. I haven't any doubt but a number of fraudulent enterprises were chased away from Kansas during the first few years that it was in operation, but the Blue-Sky Law of Kansas was not sufficient to protect the people even in the first days of its enactment from the loss of $700,000.

These reports are issued for the general benefit not only of the people of the country in which they are issued but for the general benefit of the world at large, so that they may know how Legislation is proceeding and how it is being administered, so that they may guide themselves in similar legislation. It is a reflection upon the whole system when a report should universally misstate what took place. The statement in the part I read giving the figures of the number of companies licensed and the number refused is absolutely wrong. I do not depend upon my own investigation for that statement. I discussed it with the Professor of Economics of Lawrence University. He also had investigated the files of the Banking Commissioner at Topeka and his result agreed with mine. And not only was that confirmed at the time, but the statement which I make now was published four years ago and it has never been contradicted, and it was published in the *American Economic Review*.

Interesting Defence of Law

There has been recently a defence of the Blue-Sky Law which is rather interesting. The Investment Bankers' Association of America is a very prominent organization. It is an organization somewhat similar to this throughout the United States. It looks after the interests of, they call them there Investment Bankers, here what we call Bond Brokers. It is the Bond Brokers' Association of the United States, and it is of vital interest there to all their members that legislation of this kind should be carefully looked after. They have a bulletin which they publish very often and lately they published an article by Mr. C. J. Andre, who is Secretary of the Blue-Sky Law Commissioners. That is the Association of Commissioners that administer these laws throughout the whole of the United States. I don't know that it was intended this article should be of benefit to the Blue-Sky Law. It is quite apparent from the ending of it where the Investment Bankers' Association add a little note which gives real point to Mr. Andre's remarks. He says during the first year the law was in operation in Minnesota, it was estimated at least $50,000,000 of fraudulent securities or worthless securities were excluded from the state through the efforts of the State Security Commission. You might as well say the police of Toronto prevented robberies to the extent of $2,000,000 last year. If there were no police here it might be there would be $2,000,000

stolen, but since there are police here it does not follow that the police stopped that quantity of theft. It is an illogical statement and conclusion.

One Case Justified Expense

"Compared with the service rendered to the people of the State and to the country as a whole, the expense of maintaining the Department, which for the first year, amounted to $27,000, was insignificant. Indeed, a far greater expense would have been justified to correct the evils which had such a firm footing in the state. One case alone justified the whole expense of the Department for the first year. In that case a promoter had planned to conduct an extensively advertised selling campaign to dispose of $40,000 of securities."

Now the note which is added to what I refer to, and which the point of is made, is as follows: "As a matter of fact the Blue Sky Information Committee reported to the press that the president and promoter of the Pan Motor Company, of St. Cloud, Minnesota, has been found by the Federal Court guilty of using the United States mails for a scheme to defraud (approximately $9,500,000, of the stock had been disposed of by alluring advertisements to about 70,000 victims), and sentenced to ten years in the Federal penitentiary."

Another case which is of very considerable interest is in Chicago. About a little more than a year ago the investigation took place. A company called the Consumers Packing Company was incorporated. They were licensed by the Blue Sky Law Commissioner and they did a very extensive campaign of stock selling, and very shortly it was found that the company was an absolute fraud after millions of dollars of securities had been sold. All the promoters of the company were indicted by the Grand Jury of Chicago, and the matter investigated by the State Attorney. I don't depend much on newspaper comments but this may show the popular view at any rate of the Blue Sky Law as held in Chicago at that time or following that investigation.

"Blue-Sky Legislation which seeks to eliminate fraudulent stock selling schemes through the medium of a state licensing system has been given a thorough try-out in Illinois and has proved a failure. The shortcomings of the existing law are more apparent perhaps than they would have been if its enactment had been accompanied by an appropriation which would permit of a thorough investigation by state officials before licenses for securities, commissions and sales were issued.

"That much is granted. Nevertheless it is a fact that salesmen armed with licenses to which the seal of the State of Illinois is affixed have found gullible investors ready and anxious to believe that the state has approved their project and has affixed its O.K. to their claims, that the person who refuses to buy the security is deliberately thrusting the opportunity of '20% dividends the first year, 30% the second etc.' aside forever.

"At the moment the Legislature is preparing a new Blue Sky Law. It is hoped by the bankers of the state, the bona fide investment houses and their securities salesmen, that licensing will be done away with. Though this system was originally intended to prevent fraud it has in itself proved one of the worst instruments in fraud."

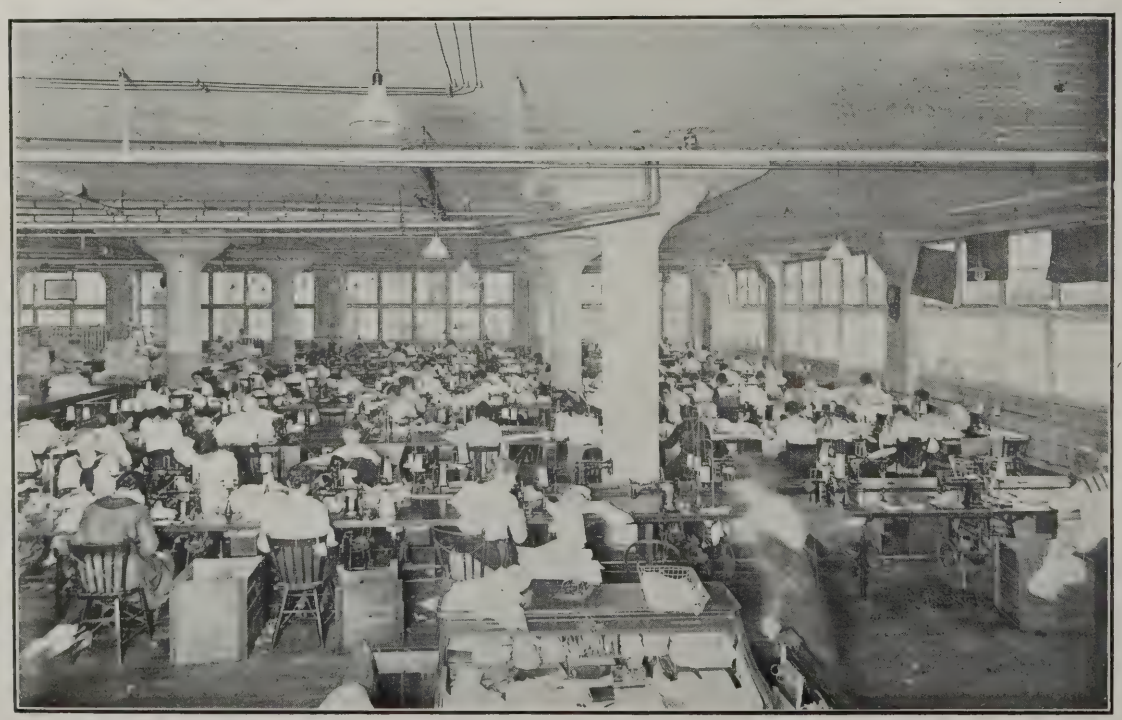
A Function Misplaced

"It is additionally objectionable, inasmuch as it makes an executive official of the state exercise a semi-judicial function, a function that properly belongs to our Courts."

Now the Blue-Sky Law of Illinois was repealed after that investigation and they have gone in that state practically to the system which was adopted in England in the year 1900.

The subject of Blue-Sky Law has quite recently been investigated by the State of New York. The Governor of that state appointed a Commission last September to fully investigate the matter. The Bill was introduced in the last session of the New York Legislature but on account of objections which were raised it was submitted by the Governor to this Commission. I will refer particularly to the findings of this Commission, but there is one of them from which I would like to read: "The difficulty is two-fold: first, that

(*Continued on page* 110)



Bright, healthy conditions under which girls are working in a Canadian shirt factory. Photo by courtesy of the Williams, Greene & Rome Co., Limited, Kitchener.

New United States Railroad Legislation

The Transportation Act, 1920, confers some very important and wide powers upon the Interstate Commerce Commission—Provision made that railways shall receive a fair return—The matter of claims

By S. B. Brown
Asst. Manager, Transportation Dept., C.M.A.

AT the time of writing, the bill to return the railroads to private ownership, which has been before the United States Congress for some time, has finally passed both the House and Senate and is now before the President for his signature. When it is passed, the new law will be known as "The Transportation Act, 1920."

The document, as submitted to the President, is quite formidable and contains 121 pages of approximately 30,000 words, divided into five titles, as follows:

(1.) Definitions of Terminology.

(2.) Termination of Federal Control.

(3.) Disputes between carriers and their employees and subordinate officials.

(4.) Amendments to the Act to Regulate Commerce.

(5.) Miscellaneous Provisions.

Commissions Rate-Making Powers

Some very important and wide powers are placed upon the shoulders of the Interstate Commerce Commission by this Act. One of the most important features is the rate-making provision, which requires that the Interstate Commerce Commission, in the exercise of its power to prescribe just and reasonable rates, shall institute, modify, establish or adjust such rates so that the carriers as a whole (or as a whole in each of such rate groups or territories as the Commission may from time to time designate), will under honest, efficient and economical management and reasonable expenditures of maintenance of way, structures and equipment, earn an aggregate annual net railway operating income equal, as nearly as may be, to a fair return upon the aggregate value of the railway property of such carriers held for and used in the service of transportation. This is subject to a proviso that the Commission shall have reasonable latitude in any particular rate which they may find unjust or unreasonable.

For a period of two years, beginning on March 1st, 1920, the Interstate Commerce Commission, in determining a reasonable rate of return, must use a sum equal to 5½ per cent. of the aggregate value referred to above, but may, at its discretion, add thereto a sum not exceeding ½ of 1 per cent. of such aggregate value, for the purpose of providing further for improvements, betterments or equipment, etc.

Method of Determining Value

The bill also provides in this section for the manner in which the Commission shall determine the aggregate value referred to. In fact, the aggregate value is to be determined from time to time by the Commission, so that there is liable to be a fluctuation.

Should any carrier receive for any one year a net railway operating income in excess of 6 per cent. of the value one-half of such excess shall be placed in a reserve fund established and maintained by the carrier, and the remaining half shall be recovered and paid to the Commission within the four months following the period for which such computation is made. This is for the purpose of establishing a general Railroad Contingent Fund.

The new Act will also give the Interstate Commerce Commission considerable power; in fact, power similar to that of the President, in regard to the question of car supply, embargoes, etc.

How Claims are Handled

In the matter of claims: amendments to the Interstate Commerce Act are provided, which will place the shipper and carrier on an equality. At the present time if the railway company finds that an undercharge has occurred, it may sue the shipper or consignee for the amount at any time within three or four years; whereas the consignee, finding an overcharge, must sue the railway company within two years. The new provision will make it clear that all actions of law by railroads for the recovery of their charges shall be begun within three years from the time the cause of action accrues—and not after.

In connection with the question of suspending tariffs filed with the Commission, the new bill proposes to restrict the period of suspension to not longer than 120 days. After hearing, whether completed before or after the rate goes into effect, the Commission may make such order with reference thereto as would be proper in a proceeding initiated after it had become effective. Suspension cases, therefore, will have the same standing as formal complaints.

Provision for Suspension

If the hearing cannot be completed within 120 days there may be a further suspension not exceeding thirty days; and, if additional time is necessary, the proposed change of rates will go into effect at the end of 150 days. The Commission, however, is empowered to require the carriers to keep accurate account of all amounts received by reason of such increase.

The different labor organizations have been very strenuously opposing any law proposed in regard to the question of compulsory arbitration. The new Act requires the carriers and their officers, employees and agents to exert every reasonable effort and to adopt every available means to avoid any interruption to the operation of any carrier, growing out of any dispute between the carriers and the employees or subordinate officials thereof; disputes to be considered and decided, if possible, in congress between representatives designated and authorized so to confer by both sides.

Railway Boards of Labor Adjustment may be established by agreement; the establishment thereof being left entirely in the hands of the railways and their employees.

The bill also provides for the creation of a Railway Board of Labor Appeals, composed of nine members equally divided between employers and employees and the public, appointed by the President, with advice and consent of the Senate, for a five-year term. The employees and employ-

ers may each nominate six persons, from whom the President will make his selections.

Another very important change is a proposed amendment to the Interstate Commerce Act permitting the Interstate Commerce Commission to prescribe minimum rates, except when one of the carriers in a through rate is a water carrier.

Freight Classification

Proposed Supplement to Classification No. 16 Considered at Meeting in Montreal

The proposed supplement 13 to Classification No. 16 was given consideration at a meeting with the Canadian Freight Association at Montreal on February 19, which was attended by the Assistant Manager of the Transportation Department. Changes in ratings and conditions of carriage were considered in connection with the following items:

Cones—Ice cream.
Olives, in bottles, packed in boxes.
Buggies, Carriages, Wagons.
Bar Iron and Steel.
Children's Vehicles.
Dressing or Blacking.
Furniture—bamboo, rattan, reed, willow, etc.
Rubber, unvulcanized.
Shells—Clam, Mussel, Oyster, or Scallop.

The question of changes in ratings on ice cream cones has been taken up further with the interested manufacturers, and as soon as this is disposed of, the supplement will be approved by the Board of Railway Commissioners.

The other changes proposed in connection with the above-mentioned articles were satisfactorily adjusted.

Freight Tariffs

Charges for Freight Tariffs Have Been Raised by Canadian Freight Association

In the December, 1918, and March, 1919, issues of INDUSTRIAL CANADA, the charges for freight tariffs supplied by railway companies to the shipping public, as well as the method of procedure in securing same, were outlined for the benefit of our members.

We have just received a general circular, No. 14, issued by G. C. Ransom, Chairman of the Canadian Freight Association, on behalf of the various lines in Eastern Canada, which proposes to increase the present charges for tariffs by 5c. a copy up to 96 pages, and for issues of a greater number of pages a new schedule has been named, as follows:

	Charge
More than 196 pages and not exceeding 296	$1 50
" 296 " " " 396	2 00
" 396 " " " 496	2 50
Exceeding 496 pages	3 00

The distribution of tariffs will remain as at present.

War Tax on Freight Tolls

New United States Regulations Issued Regarding Shipments From U. S. to Canada

The Treasury Department of the United States Internal Revenue have recently issued revised regulations, No. 49, relating to the collection of tax on transportation and other facilities, known as Title "V," Sections 500, 501 and 502 of the Revenue Act of 1918.

These revised regulations provide, at article 18, that shipments from the United States to Canada or Mexico, under through bills of lading or under through live stock contracts, need not be covered by either the temporary exemption form or certificate of exportation.

Live Stock Contract

Hearing held at Ottawa on February 10 and Decision Likely to be Announced Soon

The General Manager and Assistant Manager of the Transportation Department appeared before the Board of Railway Commissioners in Ottawa on February 10, in connection with the question of live stock contracts.

A meeting was held in Ottawa on February 9th, with a number of shippers' representatives, and at the meeting it was decided to engage counsel on behalf of the Packers' Section of this Association, as well as the Winnipeg Live Stock Exchange, and the Western Live Stock Shippers' Association, all of whom agreed to join in defraying the expense in connection therewith.

Mr. George Henderson, K.C., of Ottawa, was appointed to handle the case for the Packers' Section of this Association and the other interests at the hearing on February 10th. The matter was given very careful consideration, and it is believed that the question will be settled definitely in the very near future.

New Steamship Service

Elder Dempster & Co. to Inaugurate Line to West African Ports in May

Commencing with sailing from Montreal in May next, Elder, Dempster & Co., Limited, will inaugurate a new service between Canada and West African ports. This service should afford an opportunity for Canadian manufacturers to find a new market for many articles now being imported by West Africa from other countries.

Among the various articles imported by West Africa are quite a number which can be supplied from Canada, as the following list will show:

Bolts.
Nuts.
Washers.
Nails.
Steel Bars and Plates.
Enamelware.
Guns.
Castings.
Lamps.
Machinery.
Matchets.
Railway Material.
Rolling Stock.
Automobiles.
Bicycles.
Brassware.
Sewing Machines.
Hardware of all kinds.
Bags.
Felt.
Roofing Felt.
Ropes.
Cordage.
Cottons.
Cotton Yarn.
Woollens.
Dry Goods of all kinds.
Bricks.
Cement.
Lime.
Coal.
Salt.
Soda.
Glassware.
Paint and Oils.
Clay Pipes.
Beads.
Matches (Safety).
Mirrors.
Brooms.
Brushes.
Earthenware.
Carbide.
Soap.
Candles.
Tar.
Disinfectants.
Creosoted Timber.
Dressed and Rough Lumber.
Furniture.
Empty Casks.
Shooks.
Packing Paper.
Musical Instruments.
Toys.
Gin.
Whisky.
Rum.
Wines and Spirits.
Beer.
Mineral Waters.
Tobacco.
Cigars.
Cigarettes.
Flour.
Biscuits.
Cereals.
Sugar.
Condensed Milk.
Jams.
Canned Meats.
Canned Fruits and Vegetables.
Beef.
Pork.
Dried and Canned Fish.
Butter.
Syrup.
Molasses and Provisions of all kinds.

The first sailing, which will commence in May next, from Montreal, will touch at the following West African ports:

Dakar, Bathurst, Conakry, Sierra Leone, Sherbo, Monrovia, Grand Bassam, Axim, Sekondi (for Kumassi), Cape Coast Castle, Accra, Lome, Cotonou, Lagos, Forcados, and Creeks, and all ports beyond and up to Calabar and other points, as inducement offers.

West Africa is also in a position to export certain raw materials, which undoubtedly can be used in Canada. The principal exports are as follows:

Cocoa.	Palm Oil.
Palm Kernels.	Ground Nuts.
Mahogany.	Ginger.
Piassava.	Hides and Skins.
Rubber and Gum.	Hemp (sisal).
Ivory.	Manganese Ore, etc.

Elder, Dempster & Company, Limited, Room 133, Board of Trade Building, Montreal, who have for a number of years operated the service between Canada and South Africa, will also operate the new service, and will be pleased to supply full particulars as to freight rates, space, and any other details in regard thereto.

It is suggested that members of the Association should endeavor to take advantage of this service, and to support it to the fullest extent.

Steamship Sailings

Proposed sailings from West St. John, St. John, Halifax, and Portland in the Near Future

West St. John to Liverpool.

*Canadian Ranger	Can. Gov't Mer. Marine, Ltd.	Ab't Mar. 10
Scandinavian	C.P.O.S. Lines	Ab't Mar. 12
Empress of France	C.P.O.S. Lines	Ab't Mar. 13

*Sails from St. John.

West St. John to London.

Holbrook	C.P.O.S.-Furness Line (C.P.O.S.)	Ab't Mar. 14
*Canadian Trooper	Can. Gov't Mer. Marine, Ltd.	Ab't Mar. 16

*Sails from St. John.

West St. John to Antwerp.

Cornish Point	C.P.O.S.-Furness Line (Furness)	Ab't Mar. 13

West St. John to Glasgow.

Pretorian	C.P.O.S. Lines	Ab't Mar. 11

West St. John to Avonmouth Dock (Bristol).

Sardinian	C.P.O.S. Lines	Ab't Mar. 13

West St. John to Manchester.

Manchester Mariner	Manchester Liners	Ab't Mar. 20

West St. John to Bordeaux (France).

Wisley	Can. Trans. Atlantic (Fran-Canada Line)	Ab't Mar. 8

West St. John to St. Nazaire (France).

Alston	Marine Navigation Co.	Ab't Mar. 10

West St. John to Belfast.

Ramore Head	Head Line	Ab't Mar. 12

West St. John to Dublin.

Carrigan Head	Head Line	Ab't Mar. 10

West St. John to Buenos Ayres, Montevideo and Rosario.

A Steamer	Houston Line	Ab't Mar. 10

West St. John to South African Ports.
Cape Town, Port Elizabeth, East London, Durban, Delegoa Bay.

Jebba	Elder Dempster Line	Ab't Mar. 10

West St. John to Australasian Ports—Melbourne, Sydney, Brisbane, Auckland, Wellington and Dunedin.

Somerset	New Zealand S.S. Company	Ab't Mar. 20

Halifax to Liverpool.

Canadian Miller	Can. Gov't Mer. Marine, Ltd.	Ab't Mar. 25

Halifax to Glasgow.

Canadian Settler	Can. Gov't Mer. Marine, Ltd.	Ab't Mar. 16

Halifax to Havana, Cuba.

Canadian Trader	Can. Gov't Mer. Marine, Ltd.	Ab't Mar. 10
Canadian Sailor	Can. Gov't Mer. Marine, Ltd.	Ab't Mar. 16

Halifax to Santiago (Cuba) and Kingston (Jamaica).

Watuka	Pickford & Black	Ab't Mar. 10

Portland to Liverpool.

Dominion	White-Star-Dominion Line	Ab't Apr. 3

Portland to London.

Venusua	Anchor-Donaldson Line	Ab't Mar. 15

Portland to Glasgow.

Saturnia	Anchor-Donaldson Line	Ab't Mar. 6

Portland to Avonmouth.

Turcoman	Dominion Line	Ab't Mar. 25
Welshman	Dominion Line	Ab't Apr. 3
Cairnvalona	Thomson Line	Ab't Mar. 15

Portland to Antwerp and Rotterdam.

Haxelhurst	Rogers & Webb (R. Reford Co. agents)	Ab't Mar. 15

West St. John to South Africa—Cape Town, Port Elizabeth, East London, Durban and Delagoa Bay.

Benguela	Elder Dempster Line	Ab't Mar. 31

St. John to Havana (Cuba).

Canadian Sower	Can. Gov't Mer. Marine, Ltd.	Ab't Mar. 10
Canadian Adventurer	Can. Gov't Mer. Marine, Ltd.	Ab't Mar. 15

John McClary's Advice

How London's Veteran Manufacturer is Playing his Part in the World's Work

(From "McClary's Wireless")

On January 2nd, 1920, Mr. John McClary, president of this company, passed the milestone of his ninety-first birthday, celebrating it in the enjoyment of comparatively robust health, and more than comparatively keen zest and unabated interest in every newest turn of the road.

If we were to ask Mr. McClary to give us, out of his greater experience a message for the New Year, we are pretty sure he would hesitate a little, likely disclaiming modestly any particular merit in what he might find to say; urged, he would perhaps accede.

Let us tell you then that practically every business day of the year, nine o'clock—promptly—sees Mr. McClary coming into his office, and taking up with never flagging interest the matter of the progress of the most important affairs of the company's management at the moment—frequently, too, they are ones of which his lieutenants may be slow to recognize the true importance.

Every day in his leisure hours he plays the games that most appeal to him, the card games they are, that bring into play the skill of combined concentration, observation and recollection, deduction and foresight. And he plays them to win.

His days, each with its quota of business, recreation and work hours, are ruled systematically, by a set schedule that long practice has now made habit.

He sees to it, so far as a mere human can, that he keeps physically fit and mentally alive and in step with the latest and best in the world's progress.

And finally, he laughs often and heartily. It isn't so long ago that he one day unexpectedly discovered a most audacious and decidedly questionable deal that someone was scheming to slip over on him while the matter it concerned was completely out of his mind as being taken care of in bulk, with others of its kind.

Does anyone imagine him giving any more or less spectacular expression to wrath, as so many in the same circumstances would have felt it their privilege to do, and as many more would have considered a duty to themselves and a rehabilitation of outraged dignity?

If anyone does imagine this he is entirely in error.

He sat silent a few minutes—righteously indignant, no doubt, but wasting no words over it Then the sheer effrontery of the attempt—the overwhelming exhibition it presented of unmitigated and unbelievable nerve—struck his sense of humor, and he laughed in a way that would have been worth several more hundreds of dollars than the sum involved. Only of course, once he learned of it, he didn't let himself be robbed of the hundreds of dollars either.

From these fragments out of the whole let us formulate the New Year's message of his deeds.

"To live long and enjoy every individual day of life, have one absorbing interest, and at least one pleasurable recreation—and play them both hard.

"Deal with unvarying justice with all men, and with kindliness with those who need it.

"Keep the mind always young, and the body as young as, with intelligent care, is possible. To do these requires care, constant and unremitting, but the result is a thousand times worth it.

"Finally, laugh often and well—at your own troubles if nothing better offers."

Canada's Industrial Expansion

A Record of Progress

Enlargement at Peterboro

Canadian General Electric Co. Have Plans for Greatly Extending Their Plant

In connection with the announcement from Peterboro that the Canadian General Electric Co. were proposing to spend between $600,000 and $1,000,000 on extensions to their plant there, an official of the company states that the programme of the company has not yet been definitely decided upon and until that time no details can be announced. The company, through its president, Senator Frederic Nicholls, is asking for certain concessions in the way of fixed assessment from the city.

Building New Plant

Fielder Paper Box Co., Toronto, Are Erecting Two-Storey Building on Berkeley Street

Rapid growth in the business of the Fielder Paper Box Co., Toronto, has led to the erection of a new factory, with double the capacity of the present plant. The business was organized in April, 1918, and operations have been carried on at 208 Victoria Street. During the past summer an effort was made to rent a larger and more suitable loft for the business, but the company were unable to secure premises, and were forced, much against their will, to erect a building for themselves. The location is on the west side of Berkeley Street, and the building is of two stories, mill construction. They hope to occupy it some time in April.

Double Their Capacity

The Newell Mfg. Co. of Prescott Acquire Two Buildings Which Will Give Greater Space

The Newell Mfg. Co., Prescott, Ont., manufacturers of upholstery, hardware, pole ends, extension curtain rods, etc., have recently purchased two one-storey fire-proof brick buildings in Prescott, which they are connecting up to facilitate manufacturing operations. The two buildings combined will give about 15,000 square feet of floor space, and being of skylight construction, will provide almost a daylight factory. The probable date of completion will be April 1. While in their new quarters the company will be able to double their present output of extension curtain rods, nickel-plated goods, and brass fixtures.

Decide on Drummondville

Jenckes Spinning Co. of Pawtucket, R.I., to Build Canadian Plant at This Point

After examining the advantages offered by several Canadian manufacturing centres, the Jenckes Spinning Co., of Pawtucket, R.I., have finally decided to build their Canadian plant at Drummondville, Que., and the contract has already been let for its construction. The main building will be about 500 feet long by 127 feet wide, four stories and basement. The work of erection will be rushed, as the company are anxious to reach the producing stage as rapidly as possible. A Canadian corporation, entirely separate from the Pawtucket organization, will be formed, under the name of the Jenckes Canadian Company, Limited. The company will manufacture auto tire fabrics, and will employ from one to two thousand hands.

To Produce in the Spring

Four Wheel Drive Auto Co. Hope to Have Factory in Kitchener Completed by Then

The Four Wheel Drive Auto Co., Limited, who are erecting the first unit of their Canadian factory in Kitchener, hope to have it ready for operation early in the spring. The building is 100 x 120 feet in size, and will be followed by other units as the business grows. It is the intention of the parent company in Clintonville, U.S.A., to do a considerable amount of export business from the Canadian plant, particularly in other parts of the British Empire. The Canadian company report prospects as being very bright. With the present programme for road building, for which the F.W.D. truck is especially adapted, they are looking for excellent results from the year's business.

Enlarge Ice Cream Plant

Proprietors of Amherst Mineral Water Co. Putting Up Extension to their Premises

Messrs. Taylor and Tennant, proprietors of the Amherst Mineral Water Co., Amherst, N.S., are at present adding a one-storey brick building, 30 x 40 feet, to their ice cream department, and equipping it with the latest machinery for the manufacture of this product. This will include ice making plant, hardening and storage rooms, emulsifier and pasteurizer. They expect to add about five hands to their staff, and have the new construction completed by about April 15.

Plans for Three Mills

Provincial Paper Mills, Limited, to Build at Thorold, Mille Roches and Port Arthur

For some time back engineers of the Provincial Paper Mills, Limited, have been preparing plans for enlargements at the company's mills at Thorold and Mille Roches, and at the mill of the Port Arthur Pulp & Paper Co., the company's western subsidiary. Land for the purpose has been acquired, and at each site buildings will eventually be erected to accommodate two machines. One machine will be installed along with the construction of each building and further machines as conditions warrant, making in all six additional machines, with a total tonnage of not less than 120 tons, making, with their present production, 200 tons per day. Plans and specifications for the first additional plant have just been completed. This plant will be fully equipped with the most modern machinery available and

will have a capacity of about 20 tons daily of either book, writing or bond papers. This plant will be rushed to completion as soon as weather conditions permit, and as rapidly as the Canadian market consumes this increased tonnage the company will proceed with the installation of further machines.

Make Foundry Extension

Philip Gies Foundry, Kitchener, Expect to Have New Plant Running by May

A foundry extension will be built this spring by the Philip Gies Foundry, manufacturers of grey iron, brass, bronze and aluminum castings, Kitchener. They expect to start building about the middle of March and have the extension completed by about May 1. It will be equipped in the most up-to-date manner, with ten-ton electric crane, electric elevator, direct-connected blower for cupola, exhaust tumbling barrels, moulding machines, new core ovens, etc.

Have Extended Foundry

The National Shipbuilding Co., Limited, Goderich, Are Making Some Interesting Developments

The National Shipbuilding Co., Limited, Goderich, have extended their Foundry Division, and have now a floor space of 16,000 square feet. They have installed two 25-ton cupolas and several moulding machines for production foundry work.

The company further announce that they intend to install a mill for the refining of fibre and seed from the flax crops in the vicinity of Goderich. Details of the project, however, are not yet available. In this connection it is interesting to note that the company have recently secured the right to manufacture a new machine for flax-pulling.

Progress at Bear River

Pulp Mill of Clarke Bros., Limited, Should be Producing by the Summer

It is estimated that about two-thirds of the work of construction on the new Kraft pulp mill of Clarke Bros., Limited, Bear River, N.S., has been completed. The cold weather has delayed operations somewhat, but it is hoped to have the mill ready for operation by summer. All brick and steel is on the ground, as well as most of the machinery. In the meantime, the new sawmill adjoining the pulp mill has been completed. This has a capacity of 6,000,000 feet per annum. At the company's clothes-pin factory at Lake Jolly production has been speeded up, and, with day and night shifts operating, output has reached 3,000,000 pins per day. These are practically all sold in the British market. So far as the pulp output is concerned, the entire output of the mill has been sold on a ten-year contract to the Ironsides Board Corporation, Norwich, Conn., manufacturers of jute boards used in the manufacture of corrugated and fibre shipping cartons. The outlook for all branches of the Clarke Bros. business is good.

Secure More Space

Sangamo Electric Co. of Canada, Limited, Take in 4,000 Square Feet of Space

The Sangamo Co. of Canada, Limited, 183 George Street, Toronto, are connecting up their factory with a warehouse building in the rear, which they are converting into a factory in order to extend their plant. This will add 4,000 square feet to their manufacturing space, one-half of which will be used for an enamelling department, and the other half as a magnet plant. The addition will help to take care of the natural increase of business.

Locate in Ingersoll

The A. I. Root Company, Medina, Ohio, Will Start Branch Plant in Near Future

The A. I. Root Company, manufacturers of beekeepers' supplies, Medina, Ohio, have selected Ingersoll as the location of their Canadian branch plant, which they hope to have in operation within the next few months. They will occupy part of the Noxon Building. They do not anticipate a full force until the season of 1922, as they are obliged to build practically all of their machines, with the exception of a few standard woodworking machines.

Just how many hands will be employed is rather uncertain, much depending upon trade conditions as they find them in Canada. They are expecting, however, not only



View showing how the pulp mill of Clarke Bros., Limited, Bear River, N.S., now in course of erection, will look when completed this summer.

to take care of the trade in Canada, but in many colonies of Great Britain. All factory operations will be the same at Ingersoll as at Medina, except that they will begin on a smaller scale. Eventually, they expect to organize a separate Canadian company, though for the present the Canadian plant will be directed from the home office.

Ladder Manufacturers Expand

McFarlane Manufacturing Co., Toronto, Moved About March 1st to Larger Premises

Having been ten years in their present factory at 154-160 River Street, Toronto, McFarlane Manufacturing Co., manufacturers of ladders, washboards and other woodenware, have been forced to seek larger quarters. They have purchased the plant on Main Street, East Toronto, formerly occupied by the Canadian Wood Products Co., and moved in about March 1. They now have double the former manufacturing space, with private siding, and plenty of room for future expansion. A lot of new equipment has been installed, and it is the intention to manufacture a complete line of kitchen woodenware along with their ladders and washboards.

Planning Large Building

Dominion Loose Leaf Co., Limited, Propose to Erect Nine-Storey Building in Ottawa

The Dominion Loose Leaf Co., Limited, manufacturers of loose leaf systems, filing systems, office furniture, etc., are having plans prepared for a nine-story building in Ottawa, which will contain approximately 70,000 square feet of floor space. The company will use about 40,000 square feet and rent the balance of the building for wholesale warehouses and sample rooms. The building will probably be completed about May, 1921. With the larger floor space, output will be greatly increased.

The growth of this industry is interesting. It was established in 1910 in a building with 290 square feet of rented floor space, and a man and a boy comprised the manufacturing staff. The next year the plant was moved to premises with 1,000 feet of floor space. Again the following year it was moved to still larger quarters, and a bindery and printing plant were installed. In 1914 there was another move. Five thousand square feet of floor space were taken in a building which provided for expansion up to 20,000 square feet, and by degrees all this space was taken. The company's market has in the meantime extended to all Canada, with branches in Montreal, Toronto, Winnipeg, Vancouver, and St. John.

Buy Out Clinton Factory

Messrs. Sherlock and Manning of London Acquire Business of Doherty Piano Co.

The capital shares of the Doherty Piano Co., Clinton, have recently been purchased by Messrs. J. F. Sherlock and W. N. Manning, members of the Sherlock-Manning Piano & Organ Co., London. It is not proposed to amalgamate the two industries, but to carry them on as distinct organizations. The Clinton business will be continued under the name of Doherty Pianos, Limited, with J. F. Sherlock, president; W. N. Manning, vice-president and general manager; C. H. Ivey, secretary, and N. C. Allen, treasurer. The head office will be in London.

The capacity of the Clinton plant is 2,500 pianos per year. They have been making about 1,500, and it is hoped this year to increase the output to 2,000. The capacity of the London plant is 1,500 pianos per year, and it is hoped to reach this capacity this year. This expectation depends in both cases on getting the necessary help. Two distinct lines of pianos will be made. In the London plant the full output will be the high-grade Sherlock-Manning piano. The Clinton plant will continue to turn out the Doherty and Clinton pianos, which are first-class commercial grades. The company hope through this plant to be able to look after the export demand.

Oddly enough, both Messrs. Sherlock and Manning were originally connected with the Doherty Company, but left its employ in 1902 to organize the Sherlock-Manning Co.

New Lines and Equipment

Plant of Reynolds, Moore & Bentz, Limited, Winnipeg, is Being Speeded Up

The name of the Dyson Co., Limited, manufacturers of "Red Cross" pickles and vinegars, etc., Winnipeg, is being changed to Reynolds, Moore & Bentz, Limited. This company has experienced rapid growth during the past four or five years, and it became necessary to expand. Under the circumstances Mr. D. J. Dyson, the founder and president, offered to dispose of his interest to Mr. E. B. Reynolds, the managing director, and his associates, and this was promptly purchased. Reorganization, involving an increase of capital, was undertaken. Mr. Reynolds became vice-president and managing director; Mr. Moore, president, though not actively associated with the business; and Mr. Charles Bentz, a chemist of high reputation in the west, superintendent of the plant. Some new kindred lines are being added and new equipment is being installed. The product is being marketed from Montreal to Vancouver, and volume is only controlled by capacity to produce.

Reopening No. 1 Plant

Smith's Falls Malleable Castings Co., Limited, Find It Necessary to Extend Operations

The Smith's Falls Malleable Castings Co., Limited, are completely remodelling and re-equipping their No. 1 plant, which has been closed down for the past six years, and will shortly resume operations in it. This plant is situated on a tract of 3¼ acres, fronting the Rideau River, and contains 60,000 square feet of floor space.

The company have in the interval been running their No. 2 plant, which is a much smaller proposition, but, owing to great expansion in business, have found it necessary to re-open the larger plant. They are manufacturers of all lines of refined air furnace castings, making a specialty of railway castings. Recently they have accepted a very considerable tonnage for United States export, both in automobile and railway castings, and the capacity of No. 2 plant has been exceeded.

In their No. 2 plant they are employing approximately 100 hands. With No. 1 plant also in operation they will have 300 hands. The capacity will be increased from 2,000 to 8,000 tons.

Will Enlarge Plant

Canadian Mead-Morrison Co., Limited, to Extend Capacity of their Works at Welland

Further information about the plans of the Canadian Mead-Morrison Co., Limited, who recently bought out the business of M. Beatty & Sons, Limited, at Welland, is contained in a bulletin issued by the company on February 7:—

"Steps have already been taken to enlarge and improve the Welland plant and the new company will manufacture the extensive line of Mead-Morrison products, as well as the

Beatty line of dredges, derricks, hoists, pumps, etc. The new company has acquired from the United States company the rights to use their engineering data, plans, patents and past and future development work. This enables the Canadian company to start under the most favorable auspices. In addition to covering the Dominion of Canada, the Canadian company will also manufacture for export to the British possessions.

"The new company will have a strong local board of directors and its general officers will be Messrs. W. S. Martin, managing director; D. W. Coe, general sales manager; J. R. Story, chief engineer, and J. A. Johnson, secretary. The general sales offices are located in the Guarantee Building, 285 Beaver Hall Hill, Montreal.

Get Site in Brantford

S. C. Johnson & Son, Racine, Wis., Prepare Plans for Canadian Branch Plant

S. C. Johnson & Son, Racine, Wisconsin, manufacturers of Johnson's prepared wax and auto products, have purchased a desirable factory location, an acre and three-quarters in extent, in Brantford, and will build a Canadian plant on this site. As the company have not yet completed plans for the plant, they are unable to give any definite information about its size or character as yet. They will manufacture the following Johnson products: Prepared wax (paste and liquid), powdered wax, carbon remover, radiator cement, wood dye, perfectone enamel, paste wood filler, crack filler, etc. They state that they have opened an account with the Bank of Montreal, Brantford, and are absorbing the exchange on all Canadian business.

Instal Large Machine

Alberta Clay Products Co., Limited, of Medicine Hat, Prepare for Greater Output

The Alberta Clay Products Co., Limited, Medicine Hat, are installing a large Fate machine for the manufacture of building tile, drain tile, etc. The machine is one that they have had on hand for several years, but have never used. They hope, if conditions warrant, to be using it during the coming summer. They had also in mind some other improvements, but doubt very much whether they will go ahead with them, as there are indications of a labor shortage. With present machinery and equipment, they can largely increase output. So far as the business outlook is concerned, they report that indications could not be better.

New Manufacturing Stationers

Hay Stationery Co., of London, launch out into New Line of Business

The Hay Stationery Co., London, have recently withdrawn from the retail stationery business and are now operating a wholesale manufacturing stationery business under the name of Hay Stationery Co., Limited. In their manufacturing plant they do printing, ruling, embossing and manufacture binders, ledgers, snap-shot albums, ring books and loose leaf goods of all kinds. They occupy a warehouse, 28 x 135, with four storeys and basement. Two floors are used for manufacturing purposes, one for show and shipping rooms, one for office and storage and the basement for storage.

To Make Oxygen

Dominion Oxygen Co., Limited Formed and Will Build Five Large Plants

Dominion Oxygen Co., Limited, have been incorporated, with power to manufacture and sell oxygen, nitrogen, argon, and all other gases. The company will proceed at once with the erection of five large oxygen plants in the principal industrial centres of Canada, together with a large number of warehouses and service stations. Officers of the company are: B. O'Shea, president; Leighton McCarthy, vice-president; E. S. Whitney, vice-president; Silas Wiley, treasurer, and J. R. Knapp, secretary. Dominion Oxygen Co., Limited, are a subsidiary of the Union Carbide and Carbon Corpora-



Sunshine and fresh air are plentiful in this fine, airy workroom, where made-in-Canada shirts are being produced.

Photo by courtesy of Williams, Greene & Rome Co., Ltd.

tion, who control thirty-six distinct companies throughout the United States and Canada. The principal product will be oxygen for use in the oxy-acetylene process of welding and cutting metal.

In New Quarters

Sherer-Gillett Co., Limited, Have Recently Made Change in Location

The Sherer-Gillett Co., Limited, manufacturers of sanitary counters, Guelph, whose plant on the York Road was taken over by the Board of Trade for the Moncrief Furnace & Mfg. Co., are now located on Suffolk Street. Their new premises will give them considerably more space, and it is their intention to build up the capacity of the plant as rapidly as possible. When they are able to get sufficient machinery and men to equip it, they will begin to think about enlarging it. They anticipate rapid growth in their business.

In Larger Plant

Canadian I.T.S. Rubber Co., Limited, Have Now Doubled Their Previous Capacity

The Canadian I.T.S. Rubber Co., Limited have recently moved into their new plant at 26-32 Alpine Avenue, West Toronto. The company, who are associated with the I.T.S. Rubber Co. of Illyria, Ohio, began operations in October, 1918, and have made such progress that a larger plant was needed. Their new premises give them double the capacity of their original plant. The company's product is confined to I.T.S. rubber heels.

Start New Industry

Tube Co., of Canada, Limited, Formed to Manufacture Tubing for Bicycles, Bedsteads, etc.

Hitherto the tubing used in the manufacture of bicycles, bedsteads, implements, automobiles, etc., has been imported from the United States, but now a Canadian supply will shortly be available. The Tube Company of Canada, Limited, have been incorporated and are fitting up a plant at 233 Dufferin Street, which they hope to have producing this month. They will make from 3-8-inch to 2-inch, 14 to 22 gauge, tubing by automatic oxy-acetylene and electric welding processes, and hope to have an initial output of from 20,000 to 30,000 feet per day. Their mill will have the latest improved machinery and will be one of the most up-to-date in America. Already they have received all sorts of encouragement in the way of orders. H. W. Carter, of the Carter Welding Company, is president; P. Sorley, secretary-treasurer, and J. F. Lawson, vice-president and plant manager. Mr. Lawson was formerly with the Pedlar people, while Messrs. Carter and Sorley are pioneers of oxy-acetylene welding in Canada.

Rubber Mill Machinery

Canadian Ingersoll-Rand Co., Limited, Have Arranged to Manufacture New Lines

Arrangements have recently been concluded between the Wellman-Seaver-Morgan Company, of Cleveland and Akron, Ohio, and the Canadian Ingersoll-Rand Company, Limited, whereby the latter firm are now making and selling in Canada the Wellman-Seaver-Morgan line of rubber mill machinery. The latter comprises crackers, washers, mixing and warming mills, grooved rolls, refiners, calenders, reduction gears, fabric driers, vulcanizing presses, tire rimming and applying presses, tubing machines, accumulators, high pressure pumps, etc. The Canadian Ingersoll-Rand Company, Limited, will also take up the manufacture in Canada of Wellman-Seaver-Morgan hydraulic turbines, and a department for this work is now being organized.

The Canadian Ingersoll-Rand Company have also been appointed Canadian agents for, and manufacturers of, the Ryther and Pringle line of wood preparing machinery, for use in ground wood and chemical fibre mills, consisting of slashers, swing saws, kickers, loaders, log hauls, splitters, chip screens, shredders, etc., including the Barienger braking device for lowering heavily loaded sleighs or other vehicles down steep slopes; and will also manufacture and sell the Bird Machine Company's pulp and paper mill specialties, comprising Bird inward flow, rotary screens, Walpole screens, beating attachments and save-alls.

The company are adding some machine tool equipment in connection with the turbine department, and have a man in England at present inspecting the machines which they are having built there for this department.

Woodstock Plant Expands

Standard Tube & Fence Co., Limited will Make New Line of Welded Tubing

Standard Tube & Fence Co., Limited, of Woodstock, Ontario, have acquired the Canadian patents of Marshall B. Lloyd, covering acetylene and electric welded tubing, and have formed a close working arrangement with the Standard Parts Company of Cleveland, Ohio, to manufacture many of the latter's line of welded products. The Standard Tube Company's product has heretofore been confined to close joint tubing, but, with the purchase of the Lloyd's patents, will now be in a position to supply welded tubing required by the automobile, bicycle, bedstead, and other trades. Extensive additions to the plant in Woodstock are contemplated for this spring. Meanwhile, equipment is being installed in its present buildings, and the company expects to be ready in a few weeks to deliver the first welded tubing of this kind made in Canada.

(*Continued on page* 136)

Home Buying Advocated

"I have gone carefully through the January number of your paper and must say that I found it very interesting. It is with deep pleasure that I will again urge our employees to buy everything they possibly can in Canada. In fact, these are the instructions that I have given to any industry or corporation in which I am interested, as I am convinced that the only way to put our finances back on a proper basis is to buy outside of Canada only what cannot possibly be made here."

—A. E. LABELLE, vice-president and managing director, St. Lawrence Flour Mills Co., Limited, Montreal.

Trade Organizations Oppose Profits Tax

Boards of Trade and other Business Bodies pass strong resolution urging the Government not to re-impose the Business Profits Tax—Many reasons given why tax should not be levied

During the past few months, numerous boards of trade, chambers of commerce, and other trade organizations throughout Canada, have passed resolutions asking for the discontinuance of the tax. The following are some of the resolutions adopted:

THE CANADIAN LUMBERMEN'S ASSOCIATION
(Quebec, February 5, 1920)

"Whereas the Business Profits Tax of 1916, and amendments thereto, have expired by effluxion; it is the judgment of this Association that this tax should not be re-enacted, as it has been proven inequitable in principle, and in opposition to individual initiative and enterprise; that this Association, however, approves of the continuance and extension of the present Income Tax, in conformity to the necessities of government to meet its incurred obligations arising out of the great war.

"That this Association calls upon its Executive to appoint a strong committee to deal with the matter as its consideration shall arise in Parliament and in Council."

MONTREAL BOARD OF TRADE
(Montreal, January 31, 1920)

"Resolved, That the Montreal Board of Trade, in annual meeting assembled, emphatically endorses recent representations of the Council of the Board, stating that, in case the Government has any idea of renewing the Business Profits War Tax, the Council is unanimously opposed to the continuance thereof, for the reason that its purpose has ceased to exist, and that, by curtailing the expansion of industrial business enterprise, said tax operates inimically to the development of this country.

"That the Business Profits War Tax was, at its inception, loyally accepted by this Board, and by the business community in general, and that the only representations made at that time by the Council were with regard to minor details, at a confidential interview with the Minister of Finance, though later on, when war requirements made necessary an increase in the tax, the Council informed the Government that it was strongly of opinion that the needed extra revenue should not, as under the law providing for that taxation, be derived from but a small section of the community, but that the taxation should apply to large classes of the population, who, under that law, entirely escape, save in a very indirect manner, contributing towards the extra revenue required;

"That this meeting, therefore, prays the Government to secure any extra revenue required by some more general method of taxation."

VANCOUVER BOARD OF TRADE
(Vancouver, January —, 1920)

"Whereas the Business Profits War Tax Act expired on December 31st, 1919;

"And whereas there appears to be a possibility that this legislation will be re-enacted at the next Session of Parliament;

"Be it resolved that the Legislation Committee of the British Columbia Division of the Canadian Manufacturers Association place themselves on record as opposed to the re-enactment of such legislation, for the following reasons:

"(1) That the Business Profits War Tax Act was introduced in the first place only as a temporary and emergency war measure.

"(2) That it checks enterprise.

"(3) That it depletes capital in many cases when most required.

"(4) That it is unfair and unjust in its incidence, but particularly to new businesses and to firms with a low basis of pre-war profits.

"(5) That it has resulted in increasing prices, right up from the raw material to the distributor.

"(6) That the withdrawal of the tax would lead to an expansion of business, a lowering of prices and an increased revenue for the Government through the operation of the Income Tax."

(The foregoing resolution has since been adopted by the individual boards in the Associated Boards of Trade of British Columbia.)

BORDER CITIES CHAMBER OF COMMERCE
(Windsor, February 19, 1920)

"Whereas the Business Profits War Tax expired on the 31st December last, unless re-enacted by legislation at the forthcoming session of Parliament; and

"Whereas it is highly undesirable that the above tax be re-enacted for the following, among other reasons:

"(*a*) Because it applies only to industries employing more than a specified amount of capital, and does not apply to similar concerns of smaller capitalization.

"(*b*) Because it applies only to industrial undertakings, and not to agricultural or professional callings.

"(*c*) Because it has rendered Canadian industrial enterprises and the Canadian industrial field unattractive to the outside capital and enterprise so essential to their fullest development. Many American concerns are now anxious to establish in this country, provided that the above tax is not re-enacted. Otherwise, they will not locate on this side.

"(*d*) Because the said tax is compelling Canadian capital to seek investment in other lands—a serious and highly undesirable circumstance.

"(*e*) Because it renders impossible the provision of proper reserve funds to meet and weather periods of depression.

"(*f*) Because it absolutely restricts the possibility of plant extension, renewal and upkeep, leaving no reasonable margin for such imperative expenditures.

"(*g*) Because it hopelessly handicaps the splendidly exceptional opportunities now so freely afforded for the material and most desirable expansion of the industrial life of this young country.

"(*h*) Because it discourages the enterprise of Canadian manufacturers, who would otherwise willingly spend money necessary to secure a good foothold in foreign markets.

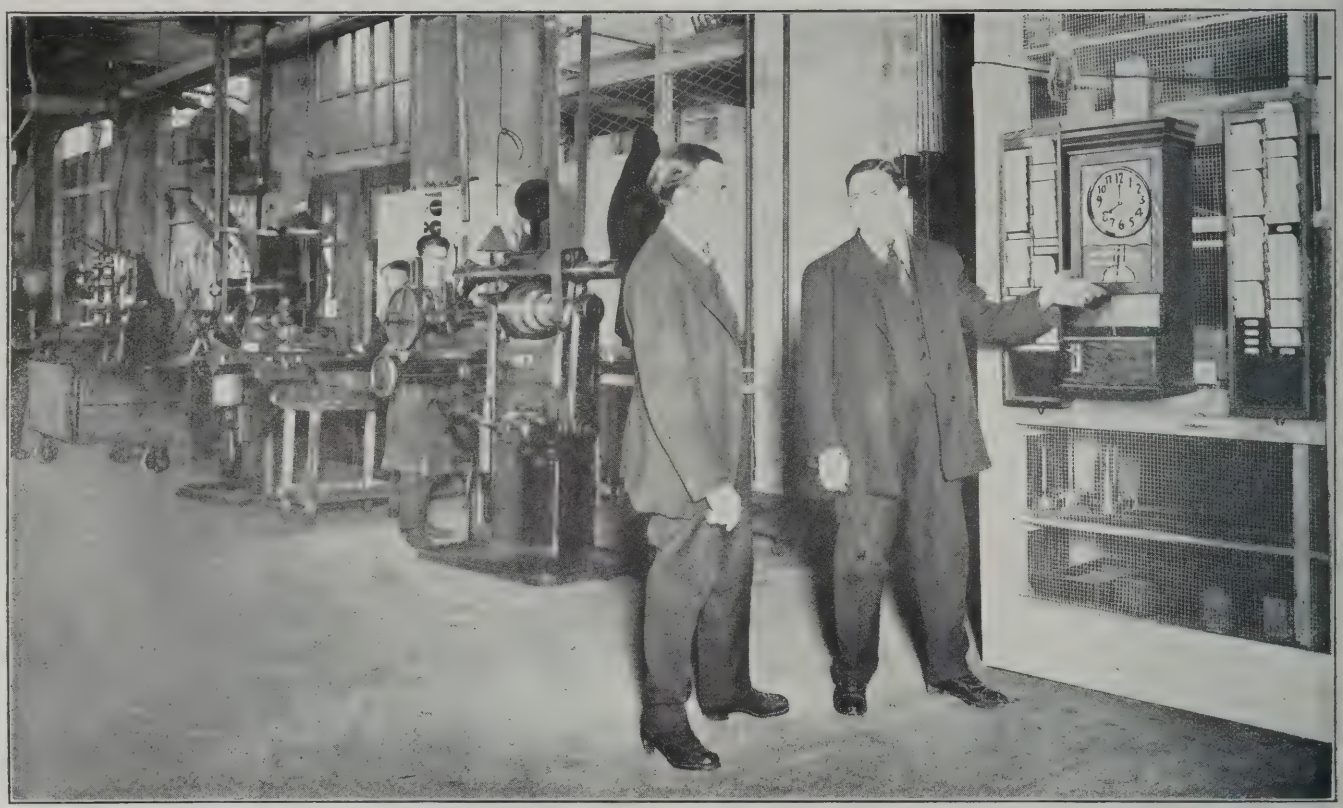
"(*i*) Because it seriously discourages production at a time when the highest possible output is a matter of supreme national importance.

"(*j*) Because its operation has unquestionably involved higher prices for the consumer of manufactured articles.

"(*k*) Because, if reduced to its final analysis, the Business Profits War Tax is, in reality, a penalty imposed upon industrial efficiency and enterprise.

"Therefore, be it resolved that, for the above reasons, this Border Chamber of Commerce respectfully petitions the Honorable the Dominion Minister of Finance, that the said Business Profits War Tax be not re-enacted."

S. B. Beare, Limited, wholesale manufacturing stationers, Toronto, are erecting a four-story and basement factory and warehouse, on a lot about 30 x 120 feet, at the corner of Wolseley and Ryerson Streets. They make office stationery exclusively, and hope to develop the manufacturing end of their business very considerably.



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"Every workman here knows there is a standard of production set for the work he is on, step by step. This International Job Recorder **prints** his actual starting and stopping time—there's no chance for disputes because the machine **automatically** prints the time record."

"It gives him 'his chance' to show his worth—a strong appeal to the natural ambition of a good workman—and teaches him to concentrate upon his own work. More than that, it creates a spirit of enthusiasm and friendly rivalry, of good fellowship and a determination to do the level best, which really is **the greatest asset the Company has.**"

"But, it also unerringly detects and 'shows up' the inefficient careless worker and blocks many an ingenious method of 'covering up'."

"Our shop is headed in the right direction. There's no driving. This International Job Recorder takes the place, to a great extent, of the Foreman's supervision—cuts out the 'human element,' often the cause of hostility on the part of some of the workmen and leaves the foreman free to plan for even greater production."

What the International Job Recorder does for another shop it can do for yours. Let us send you our latest literature.

International Business Machines Company Limited

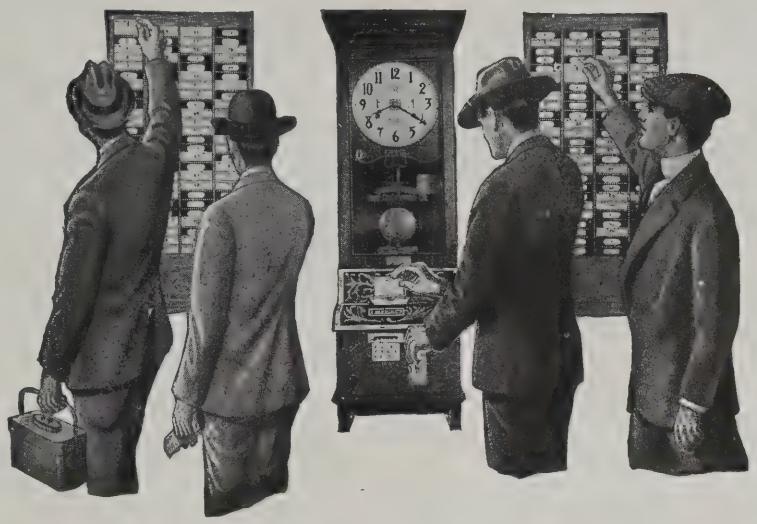
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Board of Customs Decisions

Various Rulings Made as to the Duty Applicable on a Number of Commodities

Delphos Printing Press, model B, per illustration, declared to be dutiable under tariff item 442, at the rate of 10 per cent., plus the war tariff of 7½ per cent.

Hat bands in the piece, imported by hat manufacturers for use in the manufacture of hats, declared to be entitled to entry under tariff item 638 (a)—free of duty.

Drawing pins, push pins, or thumb tacks, per general line of samples, of brass or steel, or with glass heads, declared to be dutiable under tariff item 419, at 30 per cent., plus the war tariff of 7½ per cent.

"Chemcraft" Outfit No. 2, per sample, consisting of chemicals, test tubes, etc., for use by children in performing minor chemical experiments, declared to be dutiable under tariff item 711, at the rate of 17½ per cent., plus the war tariff of 7½ per cent.

Pillow blocks or bearings, for line shafting, declared to be dutiable under tariff item 454, at the rate of 30 per cent., plus the war tariff of 7½ per cent.

Declared that shell egg cases, made of veneered wood, having sides, tops and bottoms 3-16 of an inch in thickness, and ends and middle partitions 3-8 of an inch in thickness, when imported filled with eggs, are entitled to entry under tariff item 710 (a), the war tariff of 7½ per cent. only applying, in effect from 1st December, 1919.

Departmental Rulings

Pioneer Washing Soda, per sample, from Church & Dwight of New York, ruled to be dutiable under tariff item 777, at the rate of 17½ per cent., plus the war tariff of 7½ per cent., in accordance with ruling in Appraisers' Bulletin No. 2012.

Covered wire used in the manufacture of artificial flowers, ruled to be dutiable under tariff item 407, at the rate of 30 per cent., plus the war tariff of 7½ per cent.

Extractor, used in drying fabric in weaving and dyeing operations, ruled to be dutiable under tariff item 468, at the rate of 10 per cent., plus the war tariff of 7½ per cent.

Castings partially finished, when for parts of machinery, ruled to be dutiable under tariff item 453, at the rate of 27½ per cent., plus the war tariff of 7½ per cent.

Use Norwegian Agents

An Appeal to Manufacturers Who May be Doing Business with Norway

The Association is in receipt of a letter from the Consul General of Norway at Montreal, enclosing a circular addressed to the Norwegian trading community and urging that business with Norway should be done through the medium of Norwegian agents. The communication reads:

"The Association of Norwegian Agents have complained that the sale to Norway of different articles from abroad—also from overseas—is partly effectuated through agents which are not living in Norway, but in the neighboring countries. The said Association of Norwegian Agents have expressed their dissatisfaction that the sale of goods to Norway is not made through Norwegian agents living in Norway.

"For your information, I beg to send you a few copies of appeal to the Norwegian trading community, issued by the said Agents' Association, and I should be obliged to you

YARROWS LTD.

VICTORIA, B.C., CANADA

Associated with YARROW & CO. LTD., Glasgow, Scotland

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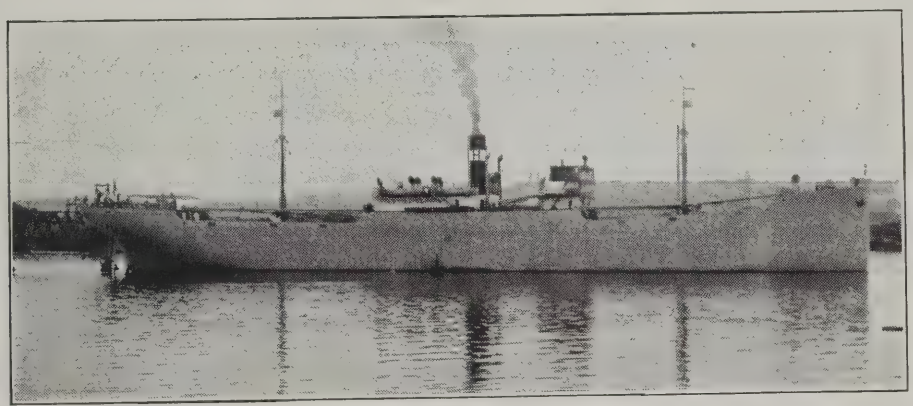
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Marine Railway—300 ft. x 52 ft., 3,000 tons D.W. capacity Graving Dock—480 ft. x 65 ft.

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S.S. "ALASKA"
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The first product
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Now giving
Excellent
Satisfaction
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Dimensions: Length, 427 ft. Beam 54 ft. Depth 29 ft. 9 ins.
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PATENT

REGARDING APPLICATIONS. After many years of service in the preparation and prosecution of applications before Patent Offices, all over the world, we are in a position to give the most careful attention.

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MARKS

for making the appeal expressed by the agents known amongst the members of your association.

"I beg leave to add that not only to the agents themselves but also to the whole trading community in Norway would it be altogether more satisfactory if business people doing trade in Norway would try to sell goods to Norway through Norwegian agents, avoiding to let trade on Norway go through channels in other countries.

"The animosity in Norway against doing business in that way is growing stronger and the firms which really want to develop their business in Norway will certainly have advantage in considering the desirability of employing Norwegian agents, not foreign agents."

Samples Being Assembled

Commercial Samples From All Parts of the World Are Being Collected at Ottawa

Some time ago the Canadian Trade Commissioners were instructed to obtain commercial samples from the countries in which they were stationed. There was some delay in getting them owing to war conditions and difficulties in securing ship space. It was also necessary to wait some time before a suitable building could be secured at Ottawa. However, the samples are now coming to hand and photographs of them are appearing from time to time in the Weekly Bulletin of the Department of Trade and Commerce. Any manufacturer who is specially interested in a particular sample may secure a photograph of it by paying for the cost of taking the photograph.

In addition to these commercial samples, there is a department for Canadian catalogues, and manufacturers are urged to see that their publications are on fyle. It is the aim to have this department as representative of Canadian manufacturing interests as possible, so that any business men from abroad visiting Ottawa can see exactly what Canadians are manufacturing.

W. Percy Lee and Charles J. Lee have established a new industry in Owen Sound, under the name of Lees' Mattress & Cotton Products Co. They are occupying a brick building, 25 x 70 feet, two stories, and besides making mattresses will manufacture pillows, awnings and kindred lines.

Three annual scholarships for a complete four years' course leading to a degree in science in the universities of Toronto, Queen's or McGill are offered by the International Nickel Co., of Canada to minor apprentices and sons of employees in the mining and smelting division, Copper Cliff. The scholarships, which cover all expenses while attending the chosen university, are awarded on the result of competitive examinations. The first of the annual examinations was held last fall and the winners are now attending university. By the end of four years the company will be paying the expenses of twelve students continuously. So far as is known the gift is unique.

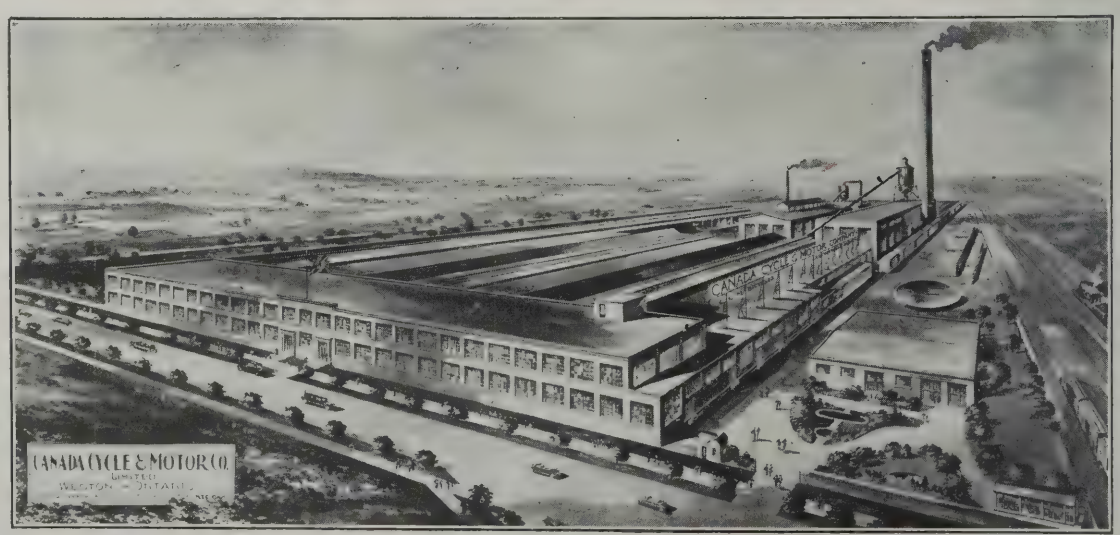
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A MODERN INDUSTRIAL LAYOUT



BERNARD H. PRACK
Architect and Engineer

JOHN V. GRAY CONSTRUCTION CO. Limited
General Contractors

DURING 1918 WE BUILT ONE EXTENSION TO THIS MODEL PLANT
IN 1919 WE RECEIVED A REPEAT ORDER FOR AN ADDITION OF 15,000 FEET OF FLOOR SPACE

OUR MOTTO---EFFICIENT, ECONOMICAL SERVICE

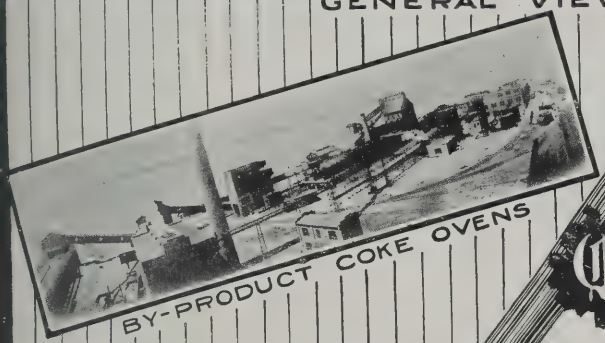
JOHN V. GRAY CONSTRUCTION CO. Limited

Branch Office
WINDSOR, CANADA

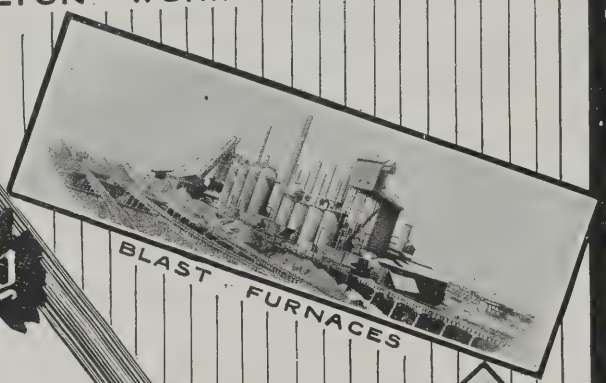
Bank of Nova Scotia Chambers, Queen, King and River Streets
TORONTO, CANADA



GENERAL VIEW HAMILTON WORKS
HAMILTON



BY-PRODUCT COKE OVENS



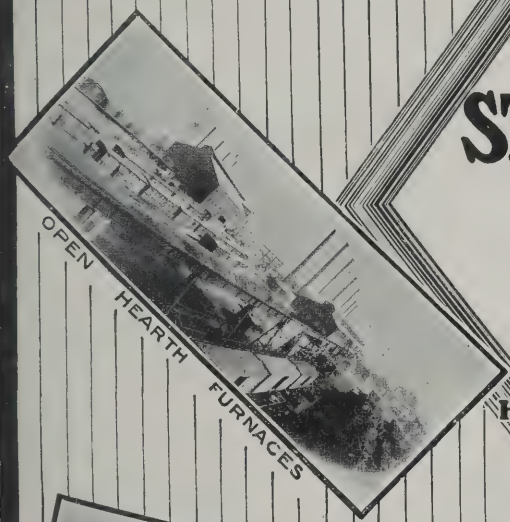
BLAST FURNACES

Quality

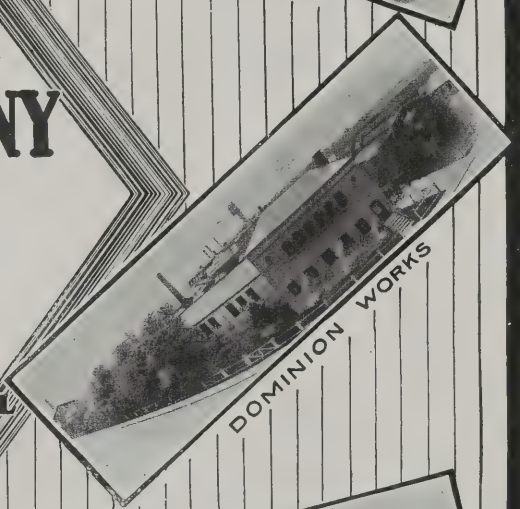
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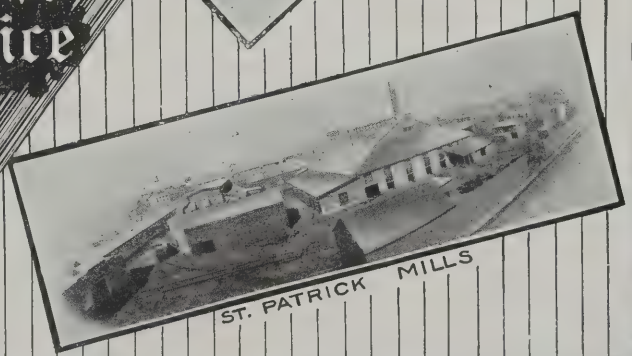
OPEN HEARTH FURNACES



DOMINION WORKS



ST. HENRY MILLS



ST. PATRICK MILLS

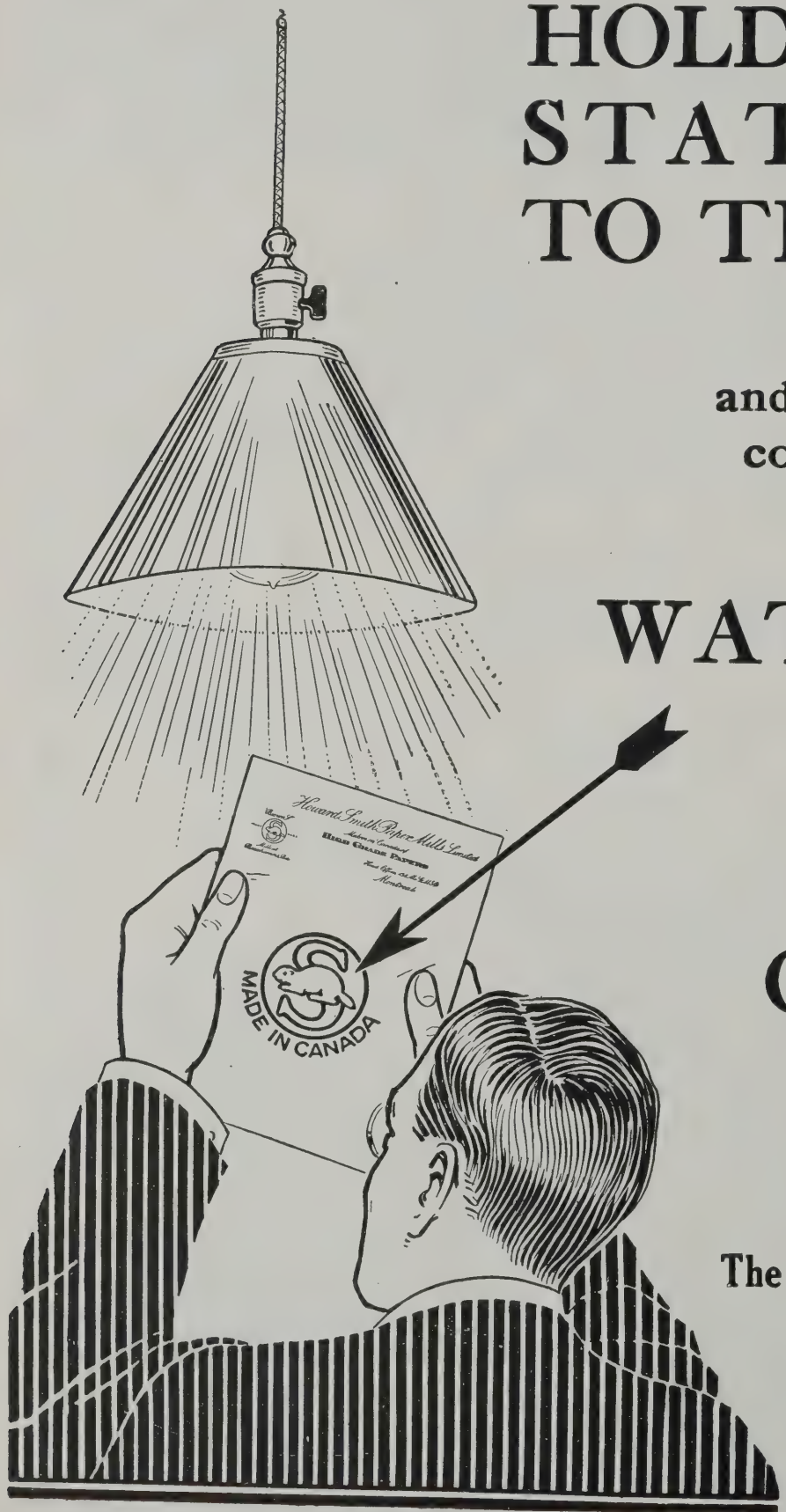


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138 McGill St., MONTREAL

MILLS AT

BEAUHARNOIS, QUE. and CRABTREE MILLS, QUE.

OFFICE AND FINANCE

Controlling a Company's Printing Bills

Reading the First Two Paragraphs of this Article will be to many Factory Executives like Holding up a Mirror to them

By JAMES H. SHEPPARD

(Reprinted from "Factory")

IN the spring of 1917, when the war and the draft foreshadowed a coming shortage of men, the President one day appointed a committee to investigate reports and routine with a view to cutting out reports and eliminating clerical operations wherever possible.

In the course of this investigation, the committee discovered that a tremendous variety and quantity of printed forms were being used. Waste was rampant. Almost anyone could have a form printed, and there was no check on the quantity ordered. Each department had its own store of printed matter, but it was usually in such a state of disorder that a new supply of a form would be ordered while plenty were still available but covered up.

Great Wastage Shown

Forms hastily considered and printed frequently were used only a day or two. Many were never used at all. Forms becoming obsolete were buried under new forms instead of being salvaged; in fact, no agency existed which could salvage them. All kinds of expensive fancy forms were used. Some were printed on carbon paper; some were serially numbered when this was really unnecessary; many were printed on cardboard or on an expensive grade of paper when cheap paper would do. Apparently it had never occurred to anyone that great economies could be effected in this field.

Investigation showed that many of the forms could be produced on a commonly used press with little labor—and unskilled at that—providing electrotypes were obtained. The possible saving on a number of representative forms was figured, and proved so startling that one of these special presses was purchased and installed, together with a small stitching machine and a paper shear. Near the printing room an attic full of old files was cleared out, shelving put in, and a stationery storeroom established. The storerooms for printed matter throughout the plant were next raided, obsolete forms sorted out, and good and obsolete forms carefully stacked in the new storeroom. A man in the sales department was put in charge, in addition to his other duties, as it was felt that supervision of the printing and stationery storekeeping ought to require only part of his time. This arrangement has worked very well.

At the same time that these changes were initiated, a permanent forms committee was created to reduce the cost of forms, to keep to a minimum the number of new forms used, and to co-ordinate new forms with those already in existence. The committee was given authority to decide whether a proposed form should be printed or not, and to determine in what way and of what material it should be made.

The stationery storeroom keeps a record of each form on a 5 by 8 inch card. This card shows the location of the stock on the shelving, the size and kind of material, and gives a complete record of orders, deliveries, balances, and costs. It thus tells the whole story at a glance, for it enables the committee to decide on the quantity to be re-ordered, to revise the base figure which determines when a re-order is to be placed, besides telling whether the form was made or purchased outside, from whom it has been purchased in the past, and what it cost.

When anyone desires a new form printed he accompanies his sketch with an application card. The forms committee examines the proposed form, having in mind the following questions:

1. Is the form necessary?
2. Cannot some existing form be used?
3. Does the estimated consumption justify the quantity ordered?
4. Is the proposed form properly co-ordinated with existing forms?
5. Is the proposed form properly designed as to convenience and cost?
6. What is the cheapest grade of paper that may be used?

If the proposed form is approved by the committee, bids are obtained from at least two printers, and an estimate made of the cost on the special press, and the job done wherever cheapest.

When the stock of any form falls to the base shown on the record card, which is usually one month's supply, the form is re-ordered. The re-order is passed upon by the forms committee in order that the form may be made to conform to changed conditions. When printing is done outside the plant rather than on the multigraph press, the original set-up forms a large part of the cost, so that it pays to buy a large quantity at one time. We normally order a six months' supply of a form, and in some special cases as much as a year's supply. This is advisable only if a careful investigation has been made as to the possibility of the form being changed or becoming obsolete.

Variation in Bids Surprising

The variation in the bids of several printers on the same job is often surprising, so that we always obtain quotations from at least two. The extraordinary difference between bids seems to indicate the absence of a real cost-finding system in many printing establishments.

Now as to what has been accomplished. In the first place, the company has not bought a scratch-pad of any description since the fall of 1917. Obsolete blue prints and forms, used repair orders, and the like, are cut up and padded. The result is very satisfactory, for not only is there a considerable saving in money, but the surface of the paper thus used is much better than the surface of that formerly purchased. In many cases new forms are printed on the backs of obsolete ones. This practice is particularly applicable

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Capital Paid Up - - $20,000,000
Rest - - - $20,000,000
Undivided Profits, $1,812,854
Total Assets - $545,304,809

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PELEG HOWLAND, President

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COLLECTIONS made at all points in Canada and in foreign centres.

DRAFTS—Money Orders and Letters of Credit issued, available throughout the world.

EXCHANGE—Domestic and Foreign Exchange bought and sold.

SAVINGS received at all Branches—interest credited half yearly at current rate.

Accounts of Merchants and Manufacturers solicited.

HEAD OFFICE - TORONTO

to file cards which have been printed on a stock of such weight that the printing does not show through.

The direct saving in money has been remarkable. In 1917 the company purchased 2,050,000 forms at a cost of $21,000, or $0.0098 a form. In 1918, the first year in which the forms committee and stationery storeroom were in operation, we purchased and made ourselves 2,330,000 forms at a cost of $18,550, or only $0.0079 a form. A careful investigation shows that the average cost of commercial printing in 1918 was 33⅓ per cent. higher than in 1917, so that had we operated in 1918 in the same way as in 1917, our cost for a form would have been $0.0131, and our printing bill would have been $30,400, instead of $18,550.

This saving was effected at a cost of about $2,500, leaving a net saving of $9,450—quite a sizeable item for a plant employing only 1,300 people.

Aside from the direct financial benefit resulting from this newly-inaugurated system, the change was of a decided advantage to the business in yet another way. Under the old method, when almost anyone could have a form printed to suit his own desires, these changes frequently did not go through the proper department heads, who ought always to be familiar with every such change in department routine. And then, too, when there is looseness and waste in part of the routine of a business, it encourages like characteristics throughout the whole plant.

Penmans Limited

Despite decrease in volume of sales, trading profits showed an increase

Sales of Penmans, Limited, for 1919, amounted to $8,538,848, a decrease of $109,534 over 1918. Net trading profits, however, amounted to $1,293,314, comparing with $1,137,171. Surplus of liquid assets over liquid liabilities has been increased by $481,897, and now amounts to $3,636,132. The reserve account and surplus amount to $4,004,269.

Montreal Cottons

Record year in the way of earnings reported by this company last year

Income of Montreal Cottons, Limited, for last year amounted to $995,039, compared with $703,096 in 1918 and $492,720 in 1917. After deducting fixed charges, taxes and a special appropriation to provide against loss due to the adverse rate of exchange, there remained a balance of $662,538. Dividends took $345,000, leaving a profit and loss balance of $317,538, which, added to the previous surplus, brought that item up to $3,089,142.

Dominion Linens

Small increase in profits recorded with general improvement in position

Profits of Dominion Linens, Limited, for 1919 amounted to $76,190, as compared with $71,142 in 1918. The company's position showed general improvement. From the previous year there had been carried forward a balance of $36,317. Dividends on preferred stock at 7 per cent. were paid, amounting to $24,500. The sum of $5,000 was written off for deferred expenses, and the same for good-will, both unchanged from the previous year. A reserve for depreciation on plant and equipment of $19,110 was charged, a few hundred dollars higher than in the previous year, and the

reserve for $3,302 for depreciation on buildings. Provision of $5,000 was allowed for depreciation of inventories, arising out of fluctuations due to war conditions, as compared with $10,000 for the same purpose a year ago. The balance at credit of profit and loss at the end of the year was $49,594, as compared with $36,317.

Wm. A. Rogers Limited

Past Year Has Been Much the Best in the History of the Company, Profits Being Large

The William A. Rogers, Limited, experienced a most successful year in 1919, earning profits of $526,382, compared with a loss of $5,208 in 1918. The result indicates the rapid manner in which the silverware industry has recovered from its war-time handicaps. The directors will resume on April 1 the payment of regular quarterly dividends on the preferred shares, and hope during the year to make up part of the 14 per cent. arrears on this stock. Total assets at the end of the year amounted to $4,583,436, as compared with $4,239,230 at the end of the previous year.

Asbestos Corporation

Company Experienced Prosperous Year with Large Increase in Net Profits

Profits of the Asbestos Corporation of Canada for the past year amounted to $1,473,752, an increase of approximately $300,000 over 1918. Including the dividend on the common stock, which was commenced at the end of 1918, and dividend on preferred stock with bonuses, the year's distribution to shareholders amounted to $530,000, as against $190,000 in 1918. The surplus account increased from $1,205,819 to $1,568,391. The working capital shows a further material improvement within the year, rising by more than $600,000 to $2,991,728.

Woods Mfg. Co.

Profits for 1919 Were About Two Hundred Thousand Less Than for 1918

Profits of Woods Manufacturing, Limited, for 1919 amounted to $639,812, comparing with $824,201 in 1918 and $770,816 in 1917. However, deductions for interest, donations and taxes were considerably less, so that balance for dividends was $608,662 against $602,000 in 1918. After paying all dividends, surplus amounted to $294,175, compared with $287,900 the previous year. The excess of current assets, including inventories, over current liabilities at the end of the year was $2,164,239, an increase of approximately $300,000.

Gunns Limited

Stock Issue of this Company Has Been Made by the National City Company

One of the latest industrial flotations in Canada has been $1,500,000 seven per cent. cumulative first preferred and participating stock of Gunns, Limited, the Toronto packing house company. The business of the company was established in 1873, being incorporated in 1902. During 1919 interests allied with Morris & Co., Chicago, purchased a

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This Bank offers peculiar advantages in handling Foreign Exchange and issuing Letters of Credit. With Branches in every part of Canada, as well as in several important cities elsewhere, and with correspondents of high standing in all parts of the world, it is able to place many advantages at your disposal.

THE CANADIAN BANK OF COMMERCE

PAID-UP CAPITAL - $15,000,000
RESERVE FUND - $15,000,000

The Merchants Bank of Canada

Head Office, MONTREAL Established 1864

Paid-up Capital - - - - - $ 7,000,000
Reserve Funds - - - - - - 7,574,043
Total Deposits (Nov. 30, 1919) - - - - 167,000,000
Total Assets (Nov. 30, 1919) - - - - 200,000,000

President: Sir H. Montagu Allan, C.V.O.
Vice-President: K. W. Blackwell
General Manager: D. C. Macarow
Supt. of Branches and Chief Inspector: T. E. Merrett

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364 Branches in Canada Extending from the Atlantic to the Pacific

Earnscliffe Linen Bond

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This announces that "Earnscliffe," a favorite with Canadian consumers for many years, is now being made in eight tints as well as white:

Azure, Blue, Pink, Buff, Golden Rod, Russet, Green, Tuscan

A decision to make Earnscliffe in a variety of tints came as a result of continued success and increase in sales of Earnscliffe White, Azure and Buff, coupled with numerous requests by its friends, for other tints.
To introduce the tints to consumers we have prepared an exceptionally fine booklet showing samples illustrated with printed and lithographed letterheads. One of these booklets will be very useful to anyone interested in commercial stationery. A request on your business stationery will bring one to you.

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ROLLAND PAPER COMPANY
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MILLS AT
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substantial but not controlling interest in the company. The company owns a slaughtering and meat-packing plant in Toronto and conducts a produce business, directly or through subsidiary companies, in Toronto, Montreal, Harriston, Walkerton, Wingham, and St. John, N.B. The company is one of the largest packers in Canada, its products consisting mainly of diversified meat and produce foods. Proceeds of the present issue are to be used solely for additional working capital. The stock is offered at 97.50 per share, yielding 7.18 per cent.

F. N. Burt Co.

Profits for 1919 Show Large Gain Over Figures for Preceding Year

Profits of the F. N. Burt Co., Limited, for 1919 amounted to $795,714, an increase of $325,000 over the previous year. In addition, there have been important extensions to plants, which have been paid for out of profits, while liabilities have been reduced and liquid assets increased. The profit and loss balance brought forward from 1918 amounted to $376,783. From this was deducted federal taxes on 1918 earnings, paid in 1919, amounting to $59,415, leaving $317,368. Adding 1919 profits, $1,113,083 was left for distribution. There was transferred to realty and plant reserve, $178,377; paid in dividends, $198,548, and written off patents, $23,112; leaving a balance carried forward of $713,044. Altogether, the year was an exceedingly favorable one, and the outlook is good.

Provincial Paper Mills

Substantial Gain in Profits Recorded by this Company During Past Year

Net profits of the Provincial Paper Mills Co., Limited, for 1919 amounted to $420,573, an increase of over $16,000. Sales, which were the largest in the history of the company, amounted to $3,838,415. The president, I. H. Weldon, states that market conditions indicate a strong demand for the coming year. The year's surplus was $133,408, and this, with the previous balance of $852,406, brings the profit and loss balance up to $852,406.

Canada Cement

Company's Net Earnings for 1919 Were Considerably Less than those for 1918

Net earnings of the Canada Cement Co. for 1919 amounted to $766,176, comparing with $1,060,644 the previous year. After paying 6 per cent. dividend on the common stock and providing for reserves, the surplus account showed a deficit of $1,252,786. This, in conjunction with the previous balance of $2,677,643, left a surplus balance of $1,424,857. Working capital amounted to $6,023,902, which compares with $5,007,913 the preceding year.

In his address to shareholders, William C. Edwards, as President, said: "The demand for cement during the past year was better than in 1918, but was far below normal, and the results of the year's business are not gratifying.

"Referring to the financial position of your company, after providing for interest on bonds, dividends on preferred and common stock and ordinary reserves, the surplus account has been reduced by $1,252,786. This is accounted for by the transferring of $1,011,119 to reserve for fire in-



Governor Harding

Federal Reserve Board

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HEAD OFFICE : : WINNIPEG

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Total Assets Over	500,000,000

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C. E. Neill	T. Sherman Rogers, K.C.

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Established 1849 **BRADSTREET'S** Capital and Surplus $1,500,000

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Reed Organs, Piano Stools, Music Cabinets.

Catalogue B.

The Goderich Organ Co. Limited
GODERICH, CANADA

Closet Seats, Flush Tanks, Medicine Cabinets,

Everything for the Bathroom.

Write for Catalogue C and Price List.

surance, and by drawing on the surplus to the extent of $241,666 for depreciation. We are pleased, however, that the company's financial position is strong, current assets, including investments and call loans, amounting to 7.74 times the current liabilities."

International Nickel

Nine-Month Statement Shows Very Heavy Decrease in Earnings and Net Profits

The effects of cessation of war business are reflected in the latest statement of the International Nickel Co., which shows that for the nine months ended December 31st, 1919, net profits were $1,799,957, as compared with $5,072,458 for the corresponding period of 1918. Earnings, before deductions of administration and general expenses, taxes and depreciation, amounted to $4,326,897, a decrease of $6,600,000. Total assets at the end of 1919 were $63,140,851, as compared with $66,909,166 at the end of 1918.

Canada Foundries

Total Income for the Year Showed Considerable Drop From That of Previous Year

The financial statement presented at the annual meeting of Canada Foundries & Forgings Co., held at Brockville on February 24, showed an operating profit of $149,623, which, with income from investments and gain on sale of Victory bonds, made a total income of $242,062. This compared with $612,117 a year ago. The net surplus was $169,915. The balance of surplus brought forward was $1,467,622. Dividends of 7 per cent. on preferred and 12 per cent. on common were paid, bringing the balance down to $1,285,222.

A change in the directorate occurred, the following being elected:—T. J. Dillon, Welland; J. H. A. Briggs, Brockville; J. T. Dillon, Buffalo; J. A. Mackay, Charles W. Maclean, W. M. Weir, Colin O. Cameron, Stephen J. L. E. Huray, Montreal; Lieutenant-Colonel Monsarrat, Ottawa; Lawrence Chamberlain, New York; Henry Bertram, Dundas.

When the Directors met these officials were unanimously named:—President and General Manager, T. J. Dillon; Vice-President, Hon. George P. Graham; Secretary-Treasurer, J. H. A. Briggs; Assistant Secretary-Treasurer, F. C. Hesch; Executive;, the President, Vice-President, W. M. Weir, J. T. Dillon.

A new stock issue is announced by the Canadian Salt Company, Limited, whose works are at Windsor, Ont., with executive office at Montreal. At the annual meeting of the shareholders, to be held on March 10, a by-law will be submitted for ratification, increasing the capital stock of the company from $800,000 to $1,500,000 by the creation of 7,000 shares of $100 each.

Penman, Limited, have declared a bonus of 2 per cent. on common shares, payable February 28, to shareholders of February 16. The regular quarterly dividend of 2 per cent. was also declared, payable May 15, to shareholders of May 5. A dividend of 1½ per cent. has also been declared on the preferred stock, payable April 30 to shareholders of April 21.

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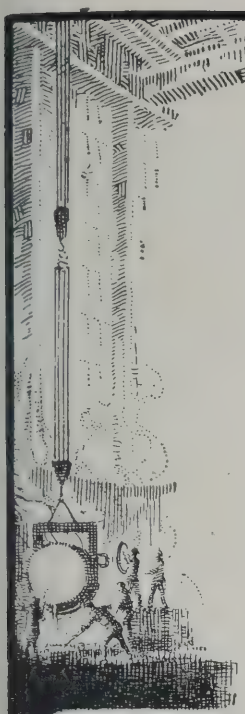
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Works Councils in the United States

Concluded from Page 67

r other plant executive, before a matter is referred to the Works Council for consideration. In a number of cases provision also is made for an opportunity on the part of the ompany officials to use their good offices to effect a settlement in case the Works Council fails to reach an agreement.

"A few of the plans provided merely for the negotiation of ifferences between an employee's committee and certain lesignated officials of the company. In these cases no detailed procedure is prescribed. But most Works Council plans call for joint action of formally constituted representatives of the employees and of the management in the settlement of matters. Such action may be taken by a joint council comprising in its membership representatives of both parties, by an employees' committee meeting in joint session with a committee representing the management, or by a special sub-committee of the Works Council made up of representatives of both employer and employees.

Majority Vote Is Decisive

"Under a majority of the plans a simple majority vote of the combined representatives of employees and management is decisive. In the case of the 'Bridgeport Plan,' however, a majority of two is required. In only four plans is a unanimous vote prescribed.

"Ultimate settlement of matters failing of adjustment by the Works Council is provided for by compulsory arbitration in only a small minority of establishments. A smaller number of plans—effective, however, in over twice as many establishments—provide for final submission to arbitration if the parties at the time agree thereto. Ultimate power of settlement rests with officials or the board of directors of the company in only a few cases. The plans in effect in a majority of the establishments make no provision for further reference after the Works Council has failed to reach an agreement. Inasmuch as in the experience of Works Councils thus far matters have seldom reached a deadlock, the means provided for the final determination of questions have been important chiefly from the standpoint of fixing the authority possessed by the individual Works Council.

"Relatively few plans qualify the right of employees to vote for members of the Works Council, other than that they must be in the employ of the company at the time of the election. A majority of the plans, however, require that employees must have certain qualifications if they are to serve as employees' representatives. The requirement most often prescribed is that they must have been in the employ of the company for a fixed period, generally one year, preceding the election. In many cases American citizenship and the attainment of the age of 21 also are stipulated. The usual term of office is one year.

Election by Double Process

"Elections most often are by the double process of nomination and election, as distinguished from direct election. However, experience with the latter method, in the Bridgeport establishments in particular, points to its superiority in certain respects over the nomination method. A simple notice is posted in the shop stating the date and other particulars with respect to eligibility, manner of voting, etc. In the interval before the election the employees have an opportunity to talk over among themselves possible candidates, while the formality, loss of time, and other disadvantages accompanying the circulation of petitions or the holding of meetings for purposes of nomination are avoided.

"In order that a large and representative vote may be cast, it has been found desirable to hold elections on the plant premises and during work hours or immediately thereafter. Attempts to conduct elections away from the plant and outside of work hours, as in the evening, have not met with success.

"It is important that the management refrain from all participation in the conduct of elections, so as to avoid any appearance of attempting to influence the results. In this connection it is sometimes provided that foremen and other representatives of the management shall be absent from the place of voting while the balloting is in progress.

"In a majority of plans provision is made for meetings of the Works Councils at regular intervals, with added provision for special meetings. The Works Council, meeting regularly, ordinarily tends to do more constructive work than if it meets only upon occasion. The regular meetings furnish constant opportunities for the interchange of ideas and experiences. It is desirable, moreover, to have matters of vital interest to the employees constantly before the Councils, if the meetings are not to become perfunctory; again, the members have less incentive to "make" business. There is no uniform practice with respect to meeting during or after work hours or on the company's or the employees' time.

"Special provisions for protection of employees against discrimination by reason of union membership, and of representatives against discrimination by reason of their activities as Council members, for the referendum and recall, for the compensation of employees' representatives and for the creation of a department of industrial relations are included in some plans.

"Experience with plans of employee representation has not as yet been sufficiently broad to establish finally the comparative merits of many specific features of organization. It is clear, however, that no one form of organization is applicable to all establishments alike. Differences in the size of the establishment, the personnel of the management, the character of the employees, and other particulars, require variations in the plan of organization. In general, it may be said, however, that Works Councils succeed best if they are (1) comprehensive in scope; (2) sufficiently flexible to permit of adaptation and development; (3) simple and informal in structure.

Details Developed in Operation

"The Works Council, being a human institution, cannot be so planned as to meet all conditions and contingencies. Hence, even after all possible care and foresight has been exercised, many details of organization still remain to be developed in operation.

"With the exception of the small group of "limited" plans, all Works Councils deal with the terms of employment and serve as "bargaining committees" to the extent that they concern themselves with such subjects as hours of work, wages, and piece rates. Most "National War Labor Board Committees," as well as three-fourths of the employers' plans, deal with these subjects. However, they are active also with respect to social and recreational undertakings and living and working conditions. The Works Councils voluntarily instituted by employers have laid particular emphasis upon these other activities.

"In a considerable number of cases, Works Councils concern themselves with shop discipline, or with hiring, promotion and discharge, but mainly in the capacity of review and recommendation only.

"The participation of Works Councils in the improvement of industrial methods and in general management functions has been relatively infrequent.

"Works Councils have met with varying degrees of success. Of the Councils regarding which experience is reported in this study, a small minority either lapsed completely or had only a perfunctory existence. With but few

A Neglected Duty

(From the Dry Goods Economist)

Communism is basically unsound. But where the alien sees, he believes, especially if he can see it in cold type. Our duty, and it is a duty we have sadly neglected, should be to educate him that he may readily discern the truth from the falsehood given him in the syndicalist publications.

exceptions these were committees established upon the initiative of the National War Labor Board or the Shipbuilding Labor Adjustment Board. However, by far the majority of Works Councils have been active, either to a limited or considerable extent.

"In most cases, Works Councils are reported as having produced favorable results, although in a number of instances, chiefly of "National War Labor Board Committees," they have apparently accomplished little or no good. In a few cases their introduction has tended even to aggravate labor difficulties. But on the whole they appear to have produced some benefit.

Increase in Good Will Apparent

"The beneficial result most frequently reported is an increase in good will and in co-operative spirit between employer and employees. A considerable number of employers reported specifically that labor difficulties were reduced because of the introduction of Works Councils. In several instances the Works Council was the means whereby strikes were prevented in individual establishments when strikes were general in the same industry or locality. It is true that labor disturbances have at times occurred in establishments where Works Councils have been introduced. Against this unsatisfactory experience, however, are to be placed the statements of the managements of several of these establishments that, in their judgment, the Works Council had modified the severity of the disturbance, and that they still regarded the Councils as of decided value.

"In several cases the Works Council was reported as influential in reducing labor turnover. Difficult questions involved in the execution of awards of the National War Labor Board often have been satisfactorily handled by Works Councils.

"With respect to productive efficiency, evidences of positive benefit resulting from Works Councils are comparatively few, although in some establishments marked increases in output were attributed, in part, at least, to the existence of such organizations. In a few instances efforts have been made by Works Councils to reduce absenteeism and tardiness, and to develop improved working methods, but the sum total of accomplishment along these lines is small.

"Employers generally reported that a relatively high type of employee has been elected to membership in Works Councils. Further evidence of this is found in the decided preference shown for men long in the service of the establishment as Council members. Instances of radicalism or unreasonableness on the part of employee members of Works Councils are conspicuously few.

"Against the benefits thus reported from the introduction of Works Councils must be placed certain other considerations. Obviously the Works Council adds to the cumbersomeness of shop management. In place of the prompt, direct decision of the foreman, or other plant executive, committee hearings, protracted negotiation, and long discussion may be required to bring questions to a final conclusion. By reason of its very nature the Works Council does not permit of the same expeditious settlement of matters that is possible where the authority of the plant executives is arbitrary and final. This apparent drawback of the Works Council may prove an advantage if it serves to prevent the abuses frequently accompanying the exercise of arbitrary power. Furthermore, by providing a regular channel for the advance of determination of employment questions, the Works Council may be instrumental in bringing about a settlement of disputed matters before they develop into strike demands.

Members Feel Must be Active

"The introduction of the Works Council also generally results, at least for a time, in an increase in the number of matters which come up for consideration. Members of the Councils, feeling that their position requires them to be active, encourage employees to bring up matters for adjustment, and the employees themselves, stimulated by the ease with which complaints can be registered, are likely to ask for consideration of trivial claims. Experience seems to indicate, however, that this disposition tends to decrease as the Works Councils become more firmly established.



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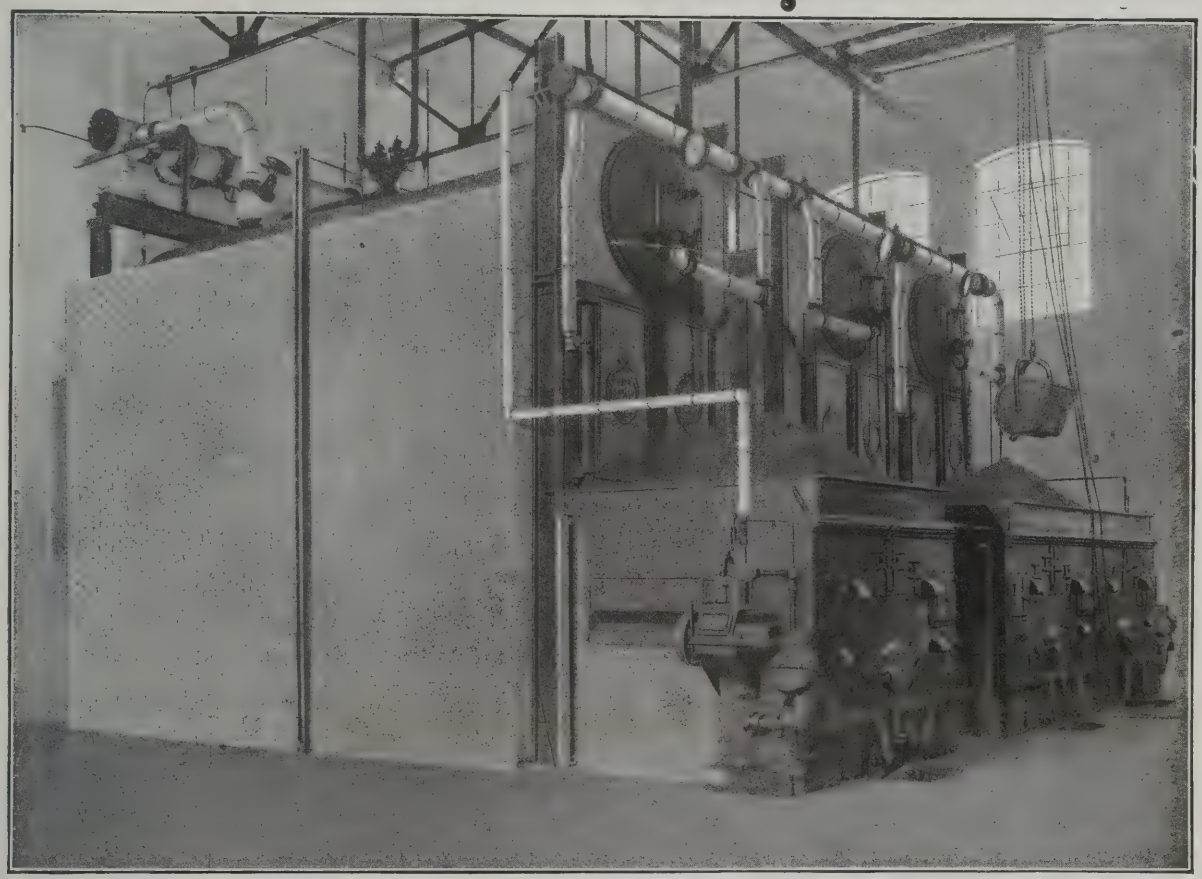
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"Experience has demonstrated that the self-same form of Works Council may succeed in one establishment and in another fail of its purpose. The explanation often is to be found in differences in the character of the management, of the shop environment, or of the workers of the two establishments.

"A feeling of mutual confidence between employer and employees in an establishment has been found essential to the successful introduction of plans of employee representation. So long as suspicion exists, it will tend to prevent the satisfactory operation of a Works Council.

"The personality of the manager of the plant or of the executive most directly concerned in the operation of the plan may make all the difference between success and failure. He must be in thorough accord with the idea of the Works Council; he must possess the confidence of his employees and must be sympathetic and tactful in dealing with them. Where the executive is lacking in these qualities, the formation of a Works Council may have the effect of actually accentuating friction and labor difficulties.

"On the other hand, a Works Council may be inadvisable in an establishment in which the employer, through personal contact and a policy of fair dealing, successfully maintains amicable relations with his employees. The employees themselves, being able satisfactorily to adjust claims and secure redress of grievances through personal negotiation with the employer, may see no advantage in a Works Council. This is especially likely to be the case in the small establishment of which the owner is the active head, and particularly if it be located in a small community. It is to be noted, however, that some Works Councils are in active existence in establishments which have relatively few employees and in plants located in small communities.

Character of Workers a Factor

"Again, the introduction of a comprehensive plan of employee representation may be inadvisable in an establishment where the workers are relatively unintelligent and unaccustomed to organization. To place suddenly in the hands of workers unused to organized action a more or less elaborate piece of governmental machinery may have either of two consequences: (1) The employees, failing to comprehend its meaning and workings, may take little active interest in it, in which case it will lapse; or (2) the employees, suddenly feeling their power, and being untrained to its intelligent exercise, may abuse it. Either of these results is particularly probable in an establishment where a large proportion of the workers are unskilled or are non-English speaking.

"Where conditions such as these obtain, a programme of intelligently directed industrial betterment work, designed to raise the intelligence of the employees, to better their standards of living, to give them a knowledge of English, to acquaint them with American institutions and to train them in methods of organization, may be preferable, for the time being at least, to the introduction of a Works Council.

May Leave Unfavorable Consequences

"An attempt to replace active union shop committees by a Works Council is almost certain to have unfavorable consequences, unless the workers acquiesce in the change. In an establishment which is highly unionized, the union shop committees represent a large share of the employees. In a closed union shop they obviously represent all of the employees. In those cases where, under a written agreement between the employer and the union, the union committees are recognized as the regular means of negotiation, they virtually function as Works Councils. So long as the employees prefer to act through such committees, a Works Council set up to supersede them might not only fail to receive their support but would probably encounter their antagonism.

"The success of a Works Council also depends in large measure upon the manner in which it is introduced. Such a body set up abruptly without any previous preparation of the ground, or without any participation by the employees in its development, often encounters obstacles.

"There is always danger that a Works Council initiated by the employer may be regarded with suspicion. It has been found that such suspicion may be overcome to a great



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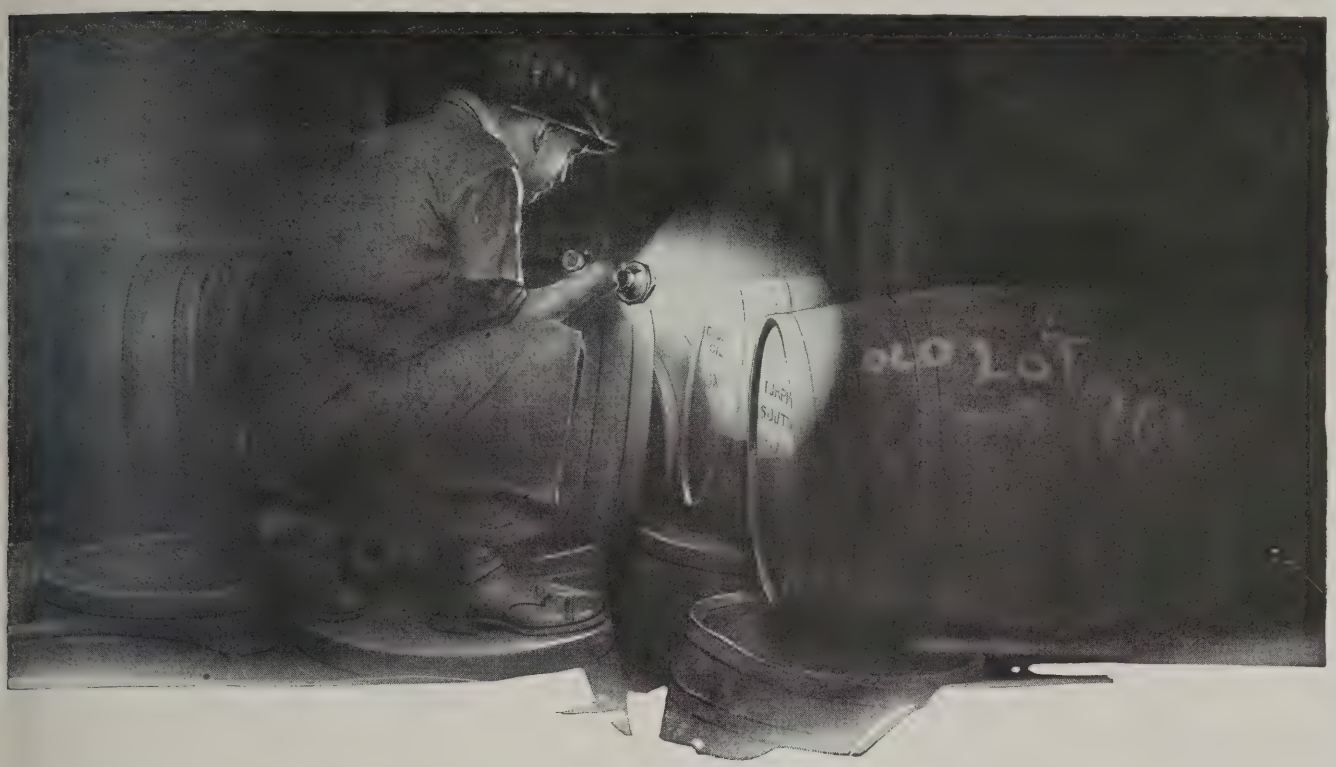
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degree by giving to the employees as large a share as practicable in the development of the project. The best results generally have been obtained where representatives of the employees have been called into consultation by the management in the formulation of the plan, or where the employees have been permitted at least to vote upon the question of its introduction.

"The spirit in which the employer proposes a Works Council has much to do with the manner in which it is received. Where it is set up by the employer condescendingly, as a sort of gratuity, it is likely not to meet with a favorable reception by the workers. On the other hand, where the Works Council is put before the workers as an arrangement designed for the mutual benefit of employer and employees, it is more likely to meet with favor.

"The importance of a thorough knowledge of the form functions and nature of the Works Council on the part o both the plant executives and the employees before it is set in operation has been demonstrated. Since the Works Council is a more or less complicated piece of machinery, it requires considerable explanation if it is to be fully understood and utilized. Moreover, the adoption of such a plan generally requires a modification of ideas and practices that have long prevailed in the establishment. It calls for a considerable readjustment in attitude, especially on the part of the foremen and other minor plant executives.

"The preliminary education and readjustment is sometimes accomplished by means of conferences and meetings with foremen and with employees, at which the features of the plan are explained and discussed. It may be facilitated also by the presentation of the plan itself in simple language and in attractive form.

Epitome of the Foregoing

"In evaluating the experience assembled in this report, certain conditions must be taken into account. The first of these is the comparatively brief period during which Works Councils have been in operation.

"Experience with Works Councils must further be judged in the light of their origin and of the unusual industrial conditions which prevailed during the war period, whe most of them were created.

"Other collateral influences surrounding their formatio should also be considered. Some of the plans were entere upon hastily without a proper understanding of their sig nificance. Others were instituted in a manner which a the very outset prejudiced their chance of success. Stil others were organized with a careless disregard of details Again, the formation of some of the Councils was accom panied by a simultaneous change in management, the adop tion of a bonus system, or some other radical change i operating conditions which may in large measure be re sponsible for their seeming success or failure.

"In view of the conflict of experience, it is as yet to early to measure definitely the permanent value of th Works Councils movement. Approximately three-fourths o the employers having Works Councils from whom an ex pression of opinion was secured declared themselves in favo of this form of industrial organization or that their exper ence had been favorable. Although further experience ma lead to a revision of judgment in some cases, the result thus far obtained with Works Councils indicate that the are worthy of unprejudiced consideration on the part o American industry."

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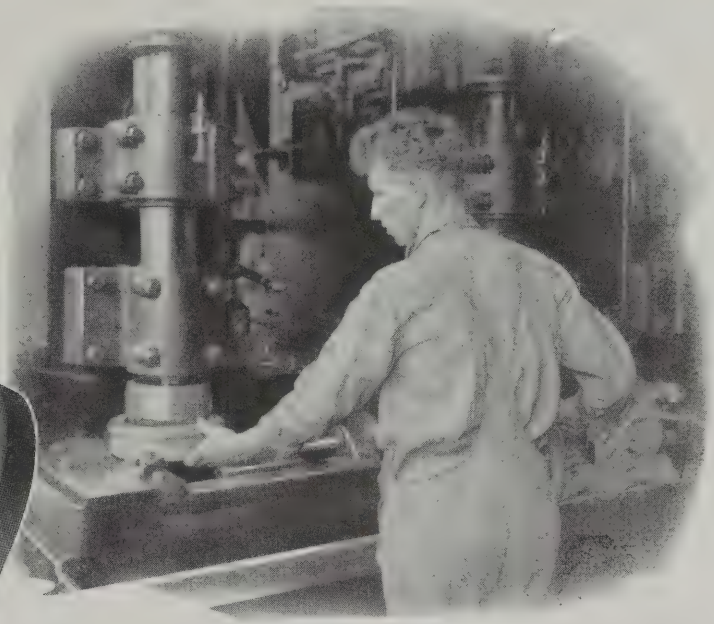
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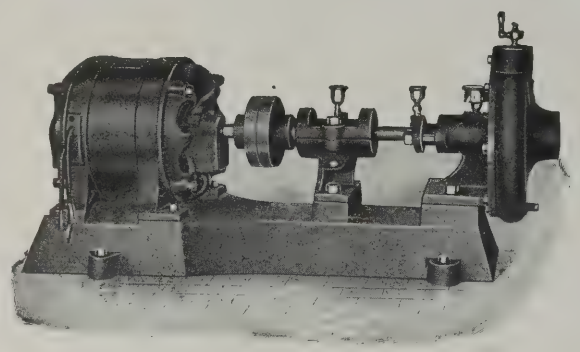
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Hamilton Motor Works, Limited
HAMILTON, CANADA

Blue-Sky Law—Is It Desirable Legislation?

(*Continued from page 74*).

legislation of this character is more effective against the legitimate dealer than it is against the crook; and, second that every attempt to assist legitimate business by striking out restrictions, tends to make the law more ineffective against the crook; and conversely, that every added restriction against the crook, applies with double and treble force against the legitimate dealer."

That is the finding of this Commission which has disapproved entirely of the introduction of Blue-Sky Law in the State of New York.

Likes the British System

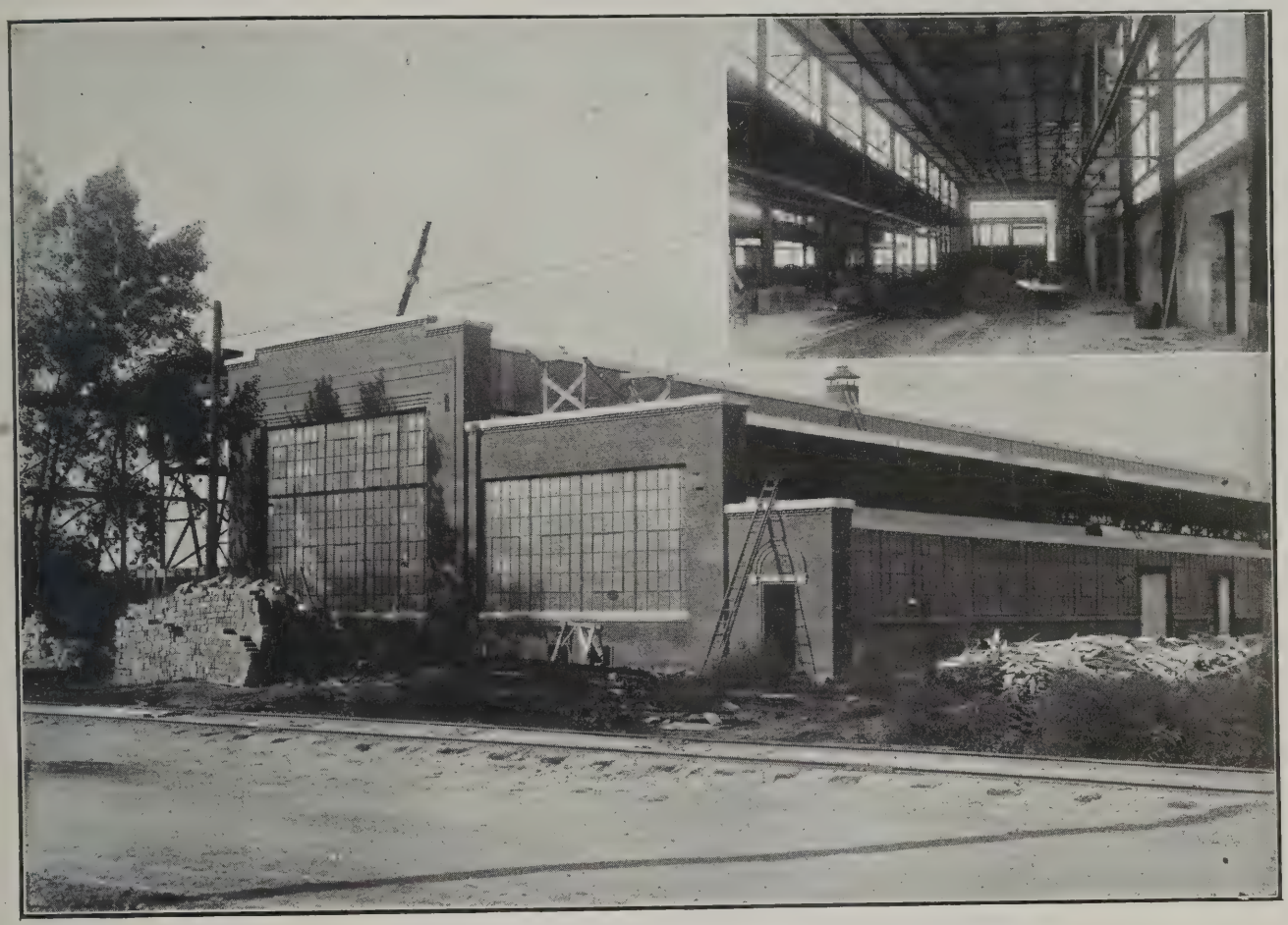
I have referred to the British system, and it is one which I should like to refer to a little more fully. It was first adopted in England in 1900 as I stated, after an investigation which was carried on over a number of years. You remember Ernest Terraholley and Whittaker Wright and several other British Blue Sky merchants had a very effective campaign in the early nineties and a Commission was appointed by the British Government to investigate the matter. That Commission was appointed I think in 1895. They proposed legislation on the subject which was investigated by a Parliamentary Committee and subsequently by a Committee of the House of Lords and it was not enacted until the year 1900.

Now there is one quotation from their report which I think is quite pertinent to this subject: "Your Committee may observe that they have dismissed from their consideration every suggestion for a public enquiry by the registrar or other official authority, into the soundness, good faith, and prospects of the undertaking at this or any other stage of a company's formation. To make any such investigation into the position of every new company complete or effectual would demand a very numerous staff of trained officers, and lead to great delay and expense, while an incomplete or perfunctory investigation would be worse than none. It would be an attempt to throw what ought to be the responsibility of the individual on the shoulders of the State, and would give a fictitious and unreal sense of "security to the investor and might also lead to grave abuses."

Go to England for Precedent

Now I would suggest that we should go to England where financial operations are carried on to a greater extent, where they have perhaps the same difficulties to encounter as we have here in Ontario, rather than to one of the Western States for our precedent.

I want to refer a little more particularly to this investigation which has been conducted in the State of New York. They considered three propositions. First of all dealing with each case of fraud as it appeared by means of an investigation board which would be authorized and kept in existence for that purpose. That was approved of as a matter of fact by this Commission. As a matter of fact these fraudulent vendors of securities usually go to the poor servant girl or to some one who cannot protect himself against the fraud. He has not either the time or money or opportunity to prosecute, as prosecution should take place for frauds of this nature, and it is suggested and approved of that there should be officials who would investigate and carry to prosecution and conviction every case of fraud of that kind that could be discovered.



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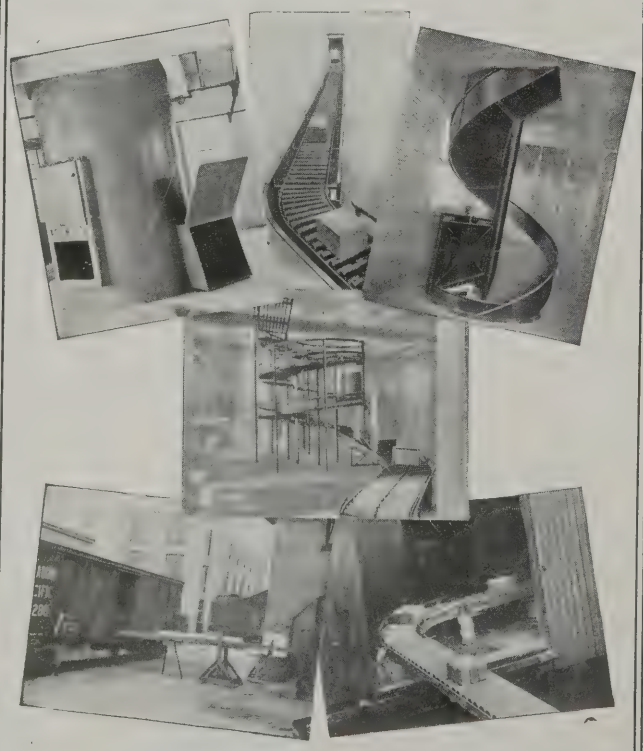
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They also considered the Blue-Sky Law situation in Kansas, not only for the investigation of securities, but also the licensing of vendors, and they disapproved of all forms of Blue-Sky Legislation. There was a minority report however and it disapproves of the Blue-Sky Law, but it approved of the British method, that is the method which was adopted in the legislation of the year 1900. Now, that legislation is nothing more than the prospectus clauses which you have in the Ontario Companies Act which was introduced in 1907, and in the Dominion Act in 1917, and which is in fact the legislation of nearly all the provinces of the Dominion.

Report on British System

In the report upon that question their opinions of these clauses are worthy of consideration: "The British Companies Act has been a law in England for many years. It has worked satisfactorily and is generally commended by the British public. London has been the financial centre of the world for many years. The amount of flotations and the volume of securities offered to the public in London is far greater than the amount issued in New York, and we may conservatively conclude that a law which has worked well in England will work equally well here. The underlying principle of that Act is publicity. The promoters and vendors of securities are required to give the public full information and are made responsible for the truthfulness of such information in both the civil and criminal courts.

The majority report even against the British method, but apparently the minority have their convictions upon the subject when they approve of the British legislation.

Now there is one phase of the Kansas legislation which may be worthy of consideration. I know I spent some time out in Kansas City and Topeka and I was astonished to find that business men, bankers and everyone I ran across, lawyers too, considered that it was an effective law and that it was working out well. Now, it bothered me a great deal after seeing what they had done in the Banking Commissioner's Office to see how the public could come to such a conclusion.

Kansas Law Widely Advertised

The Kansas Blue-Sky Law was advertised perhaps more than any legislation that ever took place. For months and for years, for at least a couple of years after it was advertised nearly every paper you would pick up and every magazine you would turn to had some commendation of the Blue-Sky Law which was in fact intended to and was already clarifying the whole business community, doing away with frauds of all kinds. That was so widely spread throughout the United States that no doubt a great many swindlers and crooks left Kansas alone. That might be one reason why the people of Kansas came to that conclusion; they were not bothered by these Blue-Sky merchants, and therefore they came to the conclusion that it was because of the law that had been passed that conditions improved.

Now that may be, but I came to the conclusion that the real effective clause of the bill was one which requires all vendors of securities to be licensed; that a man before selling stocks of any concern or company should obtain a license from some official. That may or may not be a good thing, but we have a precedent for it here in Ontario. I remember years ago there were very serious frauds committed by selling United States Insurance here in Ontario. A lot of policies were written where there were no companies. There were frauds of all kinds and the correction of that was that everyone who sold insurance of a company outside of Canada was required to be licensed. I think that I am correct in making

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that statement, and since then we have had no frauds of that kind. It absolutely cured the situation.

It might be that a great deal of good would be accomplished by such a provision here in Ontario so that a bond broker or anyone who is selling shares would require a license from a department of the Government, he would require to give a certificate of character, and if he was afterwards found to be selling securities which he knew to be fraudulent, a cancellation of his certificate would put him out of business entirely. That would undoubtedly prevent that business of selling fictitious securities. It might not accomplish, as no law will accomplish, everything that you would like to have it, but it might go a long way towards curing the difficulties which are undoubtedly at present in this country.

Values on Share Certificates

There is another method which has been introduced, not for that particular purpose, but which has perhaps the same result. It is the issue of share certificates without nominal or par value. Undoubtedly there is a great inducement for a person when he is offered a share and it has on the face of it a dollar, to be able to buy that for ten cents; he thinks he is getting ninety cents for nothing. As a matter of fact no share certificate upon which any dollar mark is placed is a true statement. It would be a miracle to find a company whose shares were worth $100 each. They might be worth $300 or they might be worth ten cents, but to have them actually worth $100 each would be a very strange condition of affairs. As a matter of fact the dollar mark on a share certificate is a misrepresentation. You can take a case where every cent of the subscribers' money goes into a company that is floated or promoted, and the minute the money is put in bricks and mortar and machinery there is a depreciation in value and the $100 is not worth $100. So that it is a mistake to have the dollar mark on a share certificate. This particularly applies to oil companies and to mining companies where the shares are sold under discount. If these shares were without the dollar mark, that is to say each share represented a proportional part of the capital of the assets of the company, there would be no likelihood of such misrepresentation. A man then would not be buying a dollar, he would be buying a 1/100,000 part of the assets of the mining or other company. That would be but for some fraudulent representation there made. As a matter of fact this kind of security has been quoted on the New York Exchange since about 1912; it was first introduced in New York State in that year, and it spread practically throughout the United States. It is the favorite form of security. As a matter of fact it has been introduced in the Province of New Brunswick and it was introduced in the Dominion Companies Act by the amendment of 1917. It is very popular at present with promoters of companies. Whether it is serving their own purpose or serving the purpose for which it was originally intended, that is, to prevent stock watering, I don't know, but at any rate it is a very favorable kind of security at the present time.

Mr. Mulvey also dealt briefly with the vexed question of Dominion and Provincial incorporation, and suggested that the difficulty might possibly be solved were the Dominion to pay over to the provinces interested the fees which were obtained by the incorporation of companies having head offices in those provinces.

In a general discussion which followed, Messrs. E. G. Long and Alfred Bicknell, well-known Toronto lawyers, participated, while a vote of thanks was tendered to Mr. Mulvey by Messrs. S. R. Parsons and W. H. Shapley.

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Strike of Union Moulders

Has Now been Running Since Last May—Point of Contention has been Hours of Labor—Moulders Insist on 44-hour Week, Instead of 48 hours as Specified by Peace Treaty

A STATEMENT has been issued by the Canadian Founders' Association dealing with the strike of union moulders in Toronto and Hamilton. As the situation is one of general interest to manufacturers, this statment is herewith published in full:

"It is perhaps not generally realized that the union moulders of Toronto and Hamilton who went on strike with the other metal trades on the 1st of May, 1919, are still carrying on, or trying to carry on, their strike. The leaders of the Moulders' Union refused to allow their men to return to work on the 1st of August on the conditions offered by the employers, which were accepted by all the other trades. The point of contention was 'hours of labor'; they would not work 48 hours per week, according to the terms of the Peace Treaty, but insisted on 44 hours, though they were offered more money per week than their original demand called for.

No Concessions to Offer

"It is very difficult to understand why the moulders of these two cities should take unto themselves so much responsibility in the struggle for shorter hours, in view of the discussions at Industrial Conferences during the year, and especially the International Labor Conference at Washington, which went on record for a 48-hour week, whether worked in six full days or 5½ days. The need of greater production, the holding down of costs, and the fact that many employers of moulders also employ other trades who are working 48 hours, seems to have made absolutely no impression on these men. One leader of the Moulders' Union, who called upon an employer to try and get the strike settled on his terms, was asked, 'And what have you to give on your side, since the employers have made so many concessions?' His reply was, 'We have absolutely nothing to offer by way of concession.'

No Really Great Benefit

"If it could be shown that there was some really great and immediate benefit to moulders in the attainment of 44 instead of 48 hours per week, an unprejudiced observer might find some cause to admire men who could suffer so much loss, inconvenience and prestige, in order to gain their end; but, when one tries to get at the bottom of this strike, it is hard to see how four hours a week less work, under all the circumstances, can bring even a measure of real compensation. Moulders are not an unhealthy class of workers, and these very men worked 10 hours a day not so very long ago. Many moulders in Canada and the United States still work 10 hours a day, and the great majority work more than 48 hours per week. Surely it cannot be a health interest that sticks in the minds of these men. If it is, surely some of them have been inconsistent, because several shops in Toronto, which were unable to withstand the strike and gave in to the Union, immediately started in to work overtime, and the returned moulders and coremakers seemed to find it quite acceptable. Moreover, many striking moulders left and went to work in shops in outside places, where hours were 50, 54, and even 60 per week, and the pay much less than they were offered here. And

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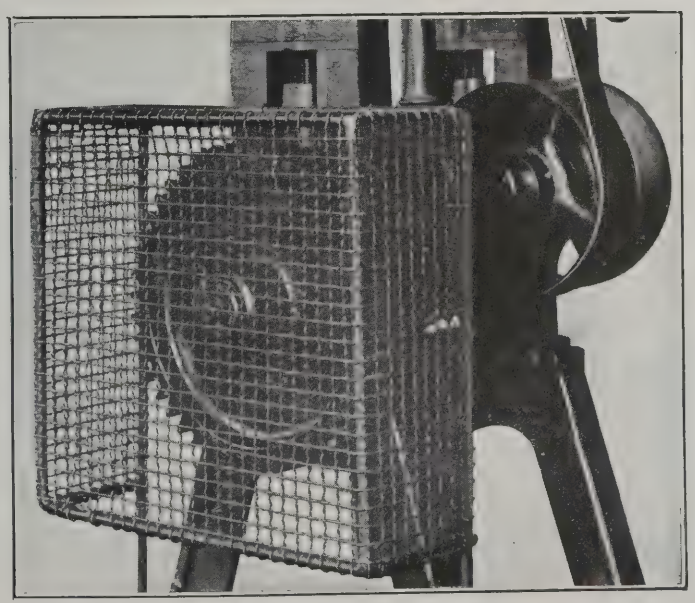
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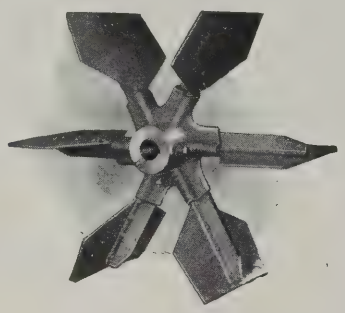
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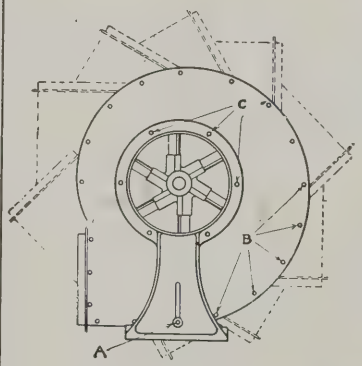
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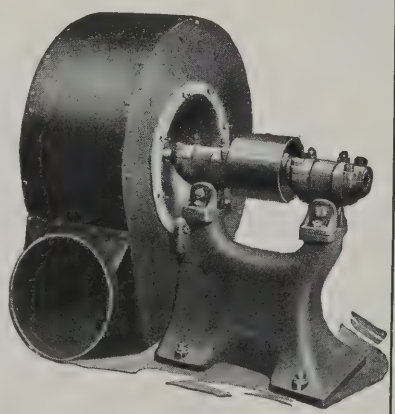
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men who came in from outside places, because conditions were better than where they came from, were put on strike pay to keep them from working. It is true that this strike has caused great loss to employers, because business in large measure went elsewhere for many months, and some plants will not get their regular business back again for a long time, even if the strike comes to an end. It is also true that the moulders have brought great loss upon themselves; they have injured their own trade beyond recovery in years. They have also injured all other metal trades which were dependent on castings for their raw material. A great deal of unemployment has been directly due to lack of castings to go on with, and men in these trades were forced to go elsewhere to obtain work. Surely these men overestimated the benefits of a 44-hour week when they place against them all these losses that the strike involved. It would look as though they were badly advised, and employers have felt that many of their old men would gladly have returned to work, except that it was difficult until permitted by headquarters.

Forcing the Issue to Conclusion

"One can understand how general headquarters might have an especial object in forcing an issue in a particular city in a case of this kind, and, assuming that to be so in this case, it would seem as though its members in these two cities were really being sacrificed to accomplish that object. Even then it is hard to find a sufficient compensation for the injury to the trade generally and to the local union in particular. Practically all the foundries in both Hamilton and Toronto are now running with non-union and ex-union men, and employers not only of moulders, but of all metal trades, have found, from their experiences in conferences and otherwise, definite lines of difference with the ideas of union leaders. This strike, because of its unreasonableness, has made it much more difficult for the unions of these two cities and the employers to find any common ground on which to work. The open shop is more definitely established as a principle than it has been before. The principle of greater production for the common good must stand, and the principle of compensation according to merit and accomplishment must stand, because they are in the best interest of all the people. Employers must be fair; they must treat their men so that they gain their confidence and co-operation. Unions would have nothing to fear, and much to gain, by standing up to all the responsibility that may come to them; they, too, must be fair if they are ever to obtain the recognition they so much desire. Fairness and integrity are hard to beat, and one might readily predict that that side to a controversy which sticks to fair methods, no matter what the other side may do, is bound to win in the end."

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It has now been announced that Canadian shipyards built 88 ships, having a total of 349,163 deadweight tons, under the Imperial Government's shipbuilding programme. Of these, 46 vessels, of 142,600 tons deadweight, were wooden, and 42, of 206,563 tons deadweight, were steel. This completes the programme, which was carried out through the Imperial Munitions Board.



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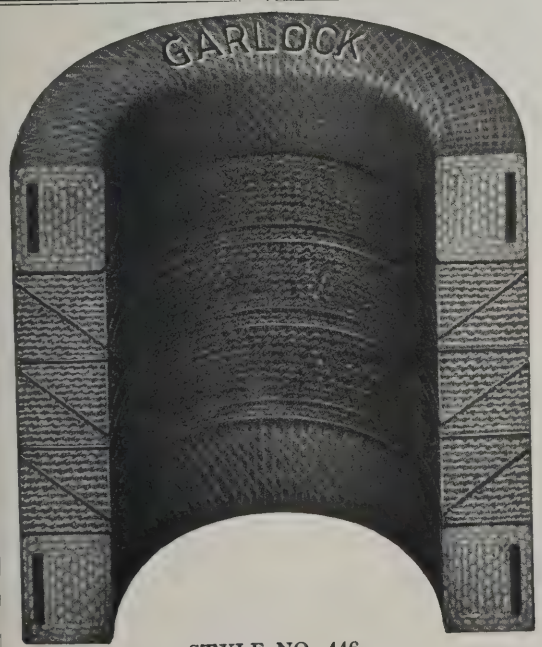
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Pulp and Paper Industry

Annual Meeting of Association, held in Montreal, when Valuable Reports were Presented by the Various Sections—Progress of the Industry Subject of Favorable Comment

THE seventh annual meeting of the Canadian Pulp & Paper Association was held in Montreal on January 30, when interesting reports were presented by the various sections into which the Association is divided.

In his presidential address, J. A. Bothwell, Brompton Pulp & Paper Co., gave a careful review of the year's work. It had been, he said, one of the most critical years in the history of the industry. Price regulation still continued, and that in spite of the fact that the industry was contributing



George Chahoon, Jr.
President, Laurentide Co., Limited
Elected President 1920-21, Canadian Pulp and Paper Association

upwards of $333,000 a day for every working day in the year to Canada's foreign trade, and helping to that extent to overcome the adverse trade balance with the United States.

"We are to-day permitted to do business abroad only on the condition that we submit to restrictions upon our right to do business at home. It is not surprising that some manufacturers regard the situation as intolerable, and have undertaken, in a perfectly legal way, to challenge the Government's position in respect to it. We now have the assurance of the Government that paper control will be terminated in June next and, while we are looking forward with confidence to the fulfilment of that assurance, we do not for a moment concede the justice or the right of the Government's treatment of our industry during the past three years."

In the book and writing section, success was achieved in preventing the reopening of the investigation into the price of book paper, this being shown to be totally unneces-





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sary. Good work was done by means of an advertising campaign, advocating the exclusive use of made-in-Canada paper in Canada.

Mr. Bothwell also referred to the visit to England of Mr. A. L. Dawe, the secretary, with a view to promoting interest in Canadian pulp and paper products among British importers; the adoption of an Association trade mark; the engagement of a traffic expert; the removal of the Association office to larger and more convenient premises.

The report of the Newsprint Section was presented by its chairman, Geo. M. McKee, Donnacona Paper Co.; the Chemical Pulp Section, by Angus McLean, Bathurst Lumber Co.; the Mechanical Pulp Section, by D. A. Clarke, Gulf Pulp & Paper Co.; the Book and Writing Section, by S. J. B. Rolland, Rolland Paper Co.; the Board Section, by J. F. Taylor; the Technical Section, by J. Stadler, Belgo-Canadian Pulp & Paper Co.; the Woodlands Section, by Robert P. Kernan, and the Coated Paper Section, by George W. Pauline, Ritchie & Ramsay, Limited.

George Chahoon, Jr., Laurentide Co., was elected president; Howard Wilson, J. C. Wilson & Co., vice-president, and A. L. Dawe, secretary-treasurer.

At the annual banquet, held at the Ritz-Carlton in the evening, the principal speakers were Sir Lomer Gouin, Geo. H. Montgomery, K.C., and Henry A. Wise, New York, representing the pulp and paper industry in the United States.

Plate Mill Opened

Celebration takes place when first plates are rolled by new Sydney Industry

Scores of invited guests, including Government and city officials, attended the ceremonies at the opening of the new ship plate mill of the Dominion Steel Corporation at Sydney on February 19. The sounding of a whistle was the signal for the beginning of the demonstration. Sharp at 2 p.m., Alex. Johnston, Deputy Minister of Marine, turned the switch that set the machinery in motion, and the first ship plate to be made in Canada was produced. Within an hour and a half sixteen plates had been cut and fashioned, and regular operations had begun.

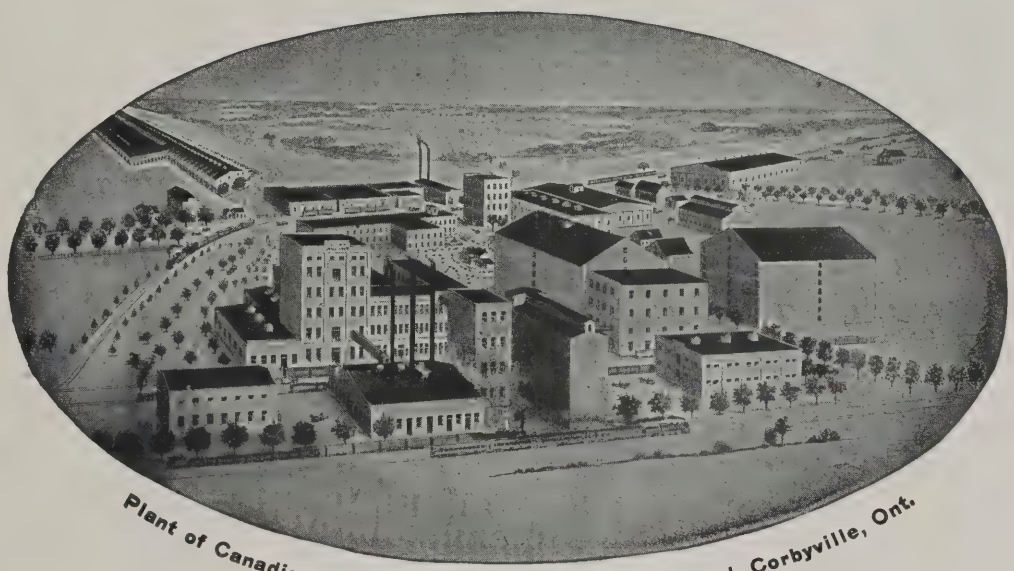
To the press, Mr. Johnston said, "The new mill started off without a hitch, and the first plates rolled are of an excellent quality, measuring up to the highest requirements of Lloyds. In fact, they are ready to go on the market right away. The 19th of February, 1920, marks a day that will be historic not only in the life of the Dominion Steel Co., but also in the shipbuilding industry of Canada and the world."

New Guelph Industry

Moncrief Furnace & Mfg. Co., Limited, Is Subsidiary of Henry-Miller Foundry Co., Cleveland

The Moncrief Furnace & Mfg. Co., Limited, who are an offshoot of the Henry-Miller Foundry Co., manufacturers of heating appliances, Cleveland, Ohio, are locating in Guelph. They have acquired the former Sherer-Gillett factory and seven acres of land. At present they are occupying the existing plant and will start operations early in the spring. It is their intention to put up another building the same size as the present one, and a little later in the summer will build a new foundry. They are now employing about ten men, who are engaged in installing machinery, and they expect in a short time to employ one hundred men. They will manufacture a full line of Moncrief hot-air furnaces, both pipe and pipeless. Mr. W. J. Shibley, late of Batavia, N.Y., is manager and treasurer.

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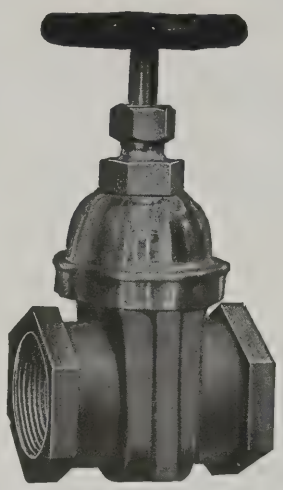
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Lumber Manufacturers

Annual Meeting of Organization, held this year in Quebec, with good Attendance—Several Noteworthy Resolutions are Passed on Various Matters of Interest to the Industry

WITH the largest attendance of members in its history, the Canadian Lumbermen's Association held a very successful convention in Quebec on February 4 and 5. The reports presented were of an encouraging nature. Membership had increased from 128 to 146, and finances were in a healthy state.

In his presidential address, W. Gerard Power, St. Pacome, Que., referred to the lessened production of lumber, which he attributed to a variety of causes. This shortage precluded any possibility of a drop in prices. He spoke favorably of consolidation in order to secure higher efficiency, and urged the removal of the excess profits tax as being a hindrance to progress. On the question of labor, Mr. Power took a strong stand in opposition to the Bolshevistic tendencies of the day. The exchange situation demanded action to prevent further depreciation in the value of the Canadian dollar.

The Executive Committee's report dealt with the work of the National Industrial Conference at Ottawa, and recommended that in the interests of Canadian labor and Canadian employers, effective steps should be taken to drive out the I.W.W. and O.B.U. organizations. It referred to the gathering of trade statistics, and urged members to see that requests for information were complied with. Reference was also made to methods of employment; to a court definition of the term f.o.b.; to exhibitions during the year; to policy *re* price quotations and to the desirability of abolishing the three-cent postal rate.

Business Profits Tax

Several resolutions were adopted. On the subject of the Business Profits Tax, it was resolved that:

"Whereas the Business Profits Tax of 1916 has expired by the effluxion of time, it is the judgment of the Canadian Lumbermen's Association, in convention assembled, that the tax be not re-enacted, as it has proved inequitable in principle and operation to individual initiative and enterprise; that this Association, however, approves of the continuance and extension of the income tax, in conformity to the necessities of the government to meet its incurred obligations arising out of the war; that this Association calls upon its Executive to appoint a strong committee to deal with the matter as its consideration shall arise in parliament and in council."

Preservation of the Forests

"This convention of the Canadian Lumbermen's Association, realizing as it does the great importance to Canada of the preservation and reproduction of the forest resources of Canada, hereby endorses the work of the Commission of Conservation in conducting a survey of the forest resources of the country, and the investigation of forest reproduction, and that the Dominion Government be urged to provide the necessary facilities for the early completion of these investigations."

Increasing Export Trade of Canada

"Having in view the great disparity between the imports and exports of this country, and the resulting effects upon the value of our currency in American exchange, be

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it resolved that the Canadian Lumbermen's Association desires to go on record as being strongly in favor of doing everything to increase the exports of all classes of materials, whether manufactured or the natural products of the forest, farm, mines or fisheries, and that a copy of this resolution be sent to the Dominion Government, and that the incoming Executive be requested to take such steps in the premises as may be necessary for the carrying out of the spirit of the resolution."

Providing Through Commodity Rates

"Whereas the situation frequently arises that sales of lumber are made for delivery from a given point on one line of railway to a destination on some other line, between which points the railway companies have no through commodity rates in effect, be it therefore resolved, that the Canadian Lumbermen's Association, in annual convention assembled, authorizes the incoming Committee on Transportation to take such steps as may be necessary to obtain the filing of tariffs by the railways providing through commodity rates between points on two or more railways, said rates to conform to rates for similar mileage between other points, which may be in effect already.'

Officers Elected

Mr. Dan. McLachlin (McLachlin Bros., Arnprior), was elected president; W. C. Laidlaw, Toronto, 1st vice-president, and Angus McLean, Bathurst, N.B., 2nd vice-president. A. E. Clark, Toronto, was elected chairman of the Transportation Committee; D. McLachlin, Arnprior, chairman of the Legislation Committee. The Executive Committee will be appointed by the President.

Directors for three years: James G. Cane, Toronto (re-elected); W. J. Bell, Sudbury, Ont. (re-elected); Duncan McLaren, Toronto (re-elected); Arthur H. Campbell, Montreal; Sir William Price, Quebec; Rufus E. Dickie, Stewiacke, N.S.; W. B. Snowball, Chatham, N.B. These were the seven directors elected at the convention in Quebec to serve for three years.

Those who are now on the Board to serve two years are: W. E. Bigwood, Toronto; Gordon C. Edwards, Ottawa; A. E. Clark, Toronto; Walter M. Ross, Ottawa; W. Gerard Power, St. Pacome, Que.; Alex. MacLaurin, Montreal; Angus McLean, Bathurst, N.B.

Those who will serve one year more are: E. R. Bremner, Ottawa; Dan McLachlin, Arnprior; W. C. Laidlaw, Toronto; George W. Grier, Montreal; D. Champoux, Restigouche, Que.; J. Fraser Gregory, St. John, N.B.; Sir D. C. Cameron, K.C.M.G., Vancouver.

To Operate This Month

Stratford Plant of Canadian Edison Appliance Co., Limited Will Be Ready Soon

It is anticipated that the plant at Stratford of the new Canadian Edison Appliance Co., Limited, will start operations during the latter part of the month. By the end of the year they expect to employ 250 hands, and hope by the following year to increase the number to 350. The concern is located in the building formerly occupied by the Mooney Biscuit Co. They will occupy at first the basement and first two floors of the factory, and expect by the latter part of 1921 to require the entire building.

The Hamilton Cotton Company, Limited, Hamilton, are adding a further story to one of the buildings of their plant, which will give 16,000 square feet of additional space, to be devoted to the installation of more webbing looms.

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Press Condemns Business Profits Tax

Continued from Page 64

commendation or a joint criticism. An income tax is an excellent thing from any point of view. A profits tax is a rotten thing from any point of view, except war necessity. President Wilson would probably realize the difference more if he had been a business man himself.

Every business or industry, to be progressive, or even safe, must make enough profit to not merely pay a fair annual dividend, but to provide for two things in addition—namely, first, a reserve against possible bad years; and, secondly, a fund for expansion—for new branches, or new equipment, or new machinery, or larger stock, or larger staff. Now, any tax upon profits tends to destroy this necessary business surplus, and so tends to injure and depress business and industry, to block progress and lessen employment.

Still, if there were no other way for the Government to get at some of the money made in business profits, a profits tax might be justifiable. But no need exists to get at such money in such a way. It can be got at in another way, a sensible way, a just way, and an easier way—namely, by income tax.

A profits tax is a tax on business surplus. An income tax is a tax on private wealth. But all business surplus must go to one of two things sooner or later—namely, either to private wealth or to business expansion. If it goes to business expansion, it should not be taxed; if it goes to private wealth, income tax can reach it.

Consider a moment. Let a business or industry show a large profit any year, or every year. What must become of that profit? Unless used in expanding the business, nothing can be done with it except divide it among the owners or shareholders. What else could you do with it? It can't go on accumulating unused. What good would it be to the proprietors in that case? Beyond what a business needs or uses, all business profit must sooner or later be divided up among the owners of the business. And whenever so divided, it becomes private income, and becomes subject to income tax.

All, therefore, that can be done by taxation to reach business profits can be done by income tax, and ought to be done by only income tax, because when you take the money away from a private individual by income tax you do not really hurt anybody or anything; whereas when you take the money away from the business of the country before it reaches any private individual, you are almost certain to be doing the whole community an injury. We have used the phrase, "you do not really hurt anybody or anything" by income tax, because the recognized principle of income taxation is to allow small incomes to be either exempt altogether from tax, or be very lightly taxed; and as to big incomes, they can stand a heavy rate of tax, without any hardship to the payers, except in their minds. In *The Journal's* estimation, taxation of large incomes can hardly be too great, and ought to be lavishly imposed by the public law, but taxation of business profits should not be tolerated in the slightest. This is an important question for Canada, because during the war a profits tax was imposed which has done harm to business and industry, and which should be stopped; while our Canadian income tax is not as heavy as it ought to be. The profits tax expires on December 31st, unless renewed by Parliament. It should not be renewed—neither in whole nor in part; but the income tax should be increased to make up any seeming loss.

A TAX ON SALES

(Toronto Mail & Empire, Feb. 10, 1920)

If the Business Profits Tax is dropped, it will not be because the revenue yielded by it is no longer needed, but because it is less defensible as a peace measure than as a war measure of finance. In war time we had to have the money, and it was right to turn to account temporary conditions that practically invited taxation. Large profits were

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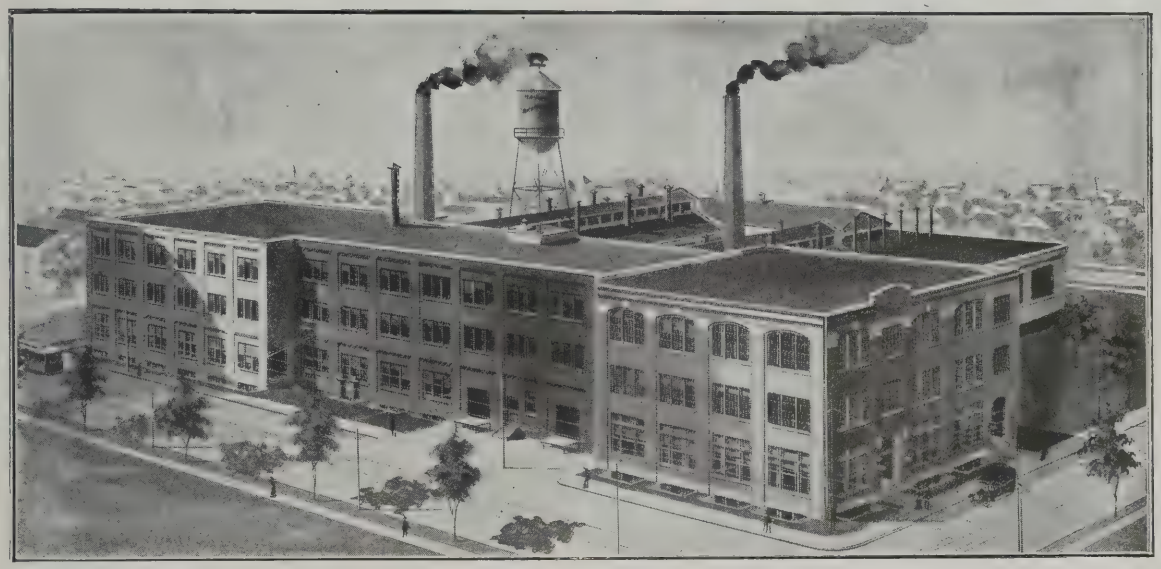
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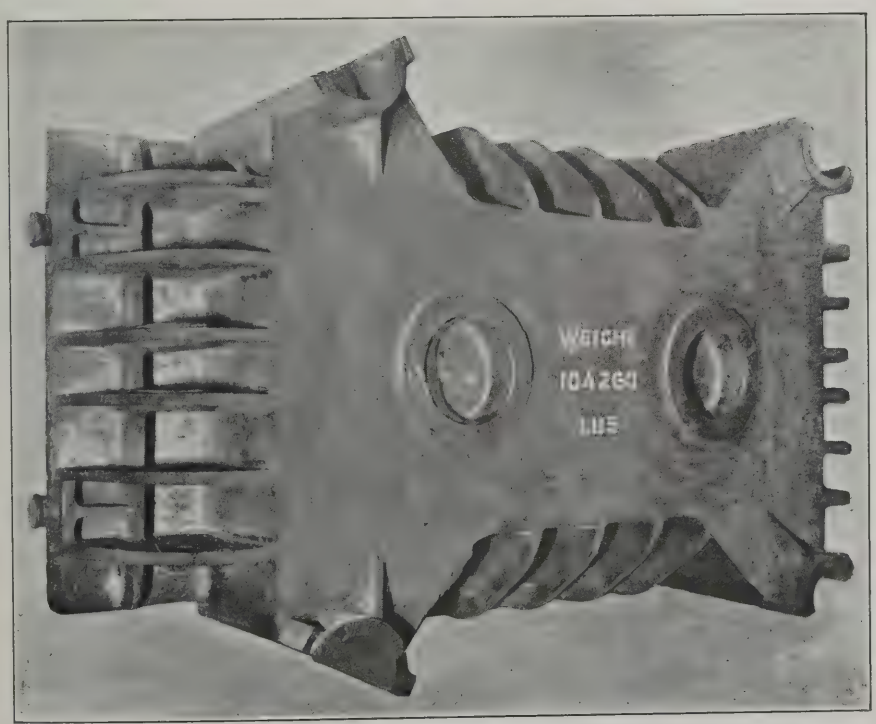
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being made in trades and industries to which the war brought vastly enlarged business. Persons and corporations engaged in those trades and industries were justly required to give the Government a share of their earnings above a margin covering charges on expense and renewal account, and a liberal rate of profit. As it was impossible to draw a line between businesses deriving benefit from the war and other businesses, the rule was adopted that all non-agricultural businesses, on a certain scale of operation, should share with the Government all that came under the definition of excess profits.

War time is past, and reconstruction time has come. Government orders will not figure in industrial and commercial business as they did in war days. Hence, the fairness of the requirement to divide profits, as such, with the Government will seem more questionable. Moreover, in a time of reconstruction, it will be an object of public policy to encourage enterprise of an industrial and commercial character to expand and increase production. By giving the conductors of trade and industry a chance to add to capital, the Government will promote enlargement of manufacturing capacity and trading operations; will in this way enable the body of returned men and of worthy immigrants to become absorbed in wage-earning employment; will conduce to the wealth of the country; to the lowering of the cost of living, and to the balancing of our trade with the United States. And, of course, the fountains of revenue from the other sources of ways and means devised by the Government will be made more flowing, and the solution of the national problem of making ends meet will be facilitated.

In reconstruction time the Excess Profits Tax might prove a hindrance to such development. Further, it might be a waning source of revenue. The Business Profits Tax was a good milch cow in war time, but might prove disappointing in peace time. Prices cannot keep up in the face of the omens to be read in the almost daily quotations of the international exchanges. There is certain to be a steady contraction of currencies towards the normal gold basis. Prices will come down and profits will be made to look less ample. The time for depending on the excess profits for satisfactory results to the national revenue and to the industry of the country is fast passing, if it is not already past.

But instead of less revenue, the Government has need of more revenue. Some mode of taxation must be devised to take the place of the Business Profits Tax, a mode that will give a still larger return, without handicapping commercial enterprise. A small tax on turnover would satisfy the conditions. A tax of one-half per cent. on the total value of the sales made in every business would yield a very much larger revenue than the $32,000,000 obtained from the Business Profits Tax in the last fiscal year, and would be practically unfelt. While business men could recoup themselves for this tax out of prices, it would not have a tendency to inflate prices by swelling profits. It is an objection to the Business Profits Tax that it is regarded by some people as a license to profiteering. At a time when most people will find it necessary to carry on business at moderate prices, a turnover tax would seem to be the ideal arrangement. Even a higher rate than we have suggested would not be burdensome to anybody, because of its wide final distribution over all the people, and it would not retard business at any stage or discourage expansion or new ventures. Not less than $50,000,000 might easily be raised from a small tax on sales, and even a larger amount might be obtained without being missed.

FOR AN EQUITABLE TAX

(Chicago Tribune, Jan. 27, 1920)

Excess profits taxes provide money quickly. But it is doubtful if the long continued policy of excess profits taxes is an economic advantage. It is one thing to take satisfaction out of an increased national bank account; quite another to batten that account at the expense of the healthy growth of industry when other means are accessible.

We are not so ingenious as to think that industry is to escape its obligations to the Government, but we are concerned about the proper methods of imposing those obligations. Industry—to employ a rough figure—is the cow that gives us our milk. Is it just to take the milk and also slice off choice porterhouses? And may we expect the animal to survive such exorbitant demands?

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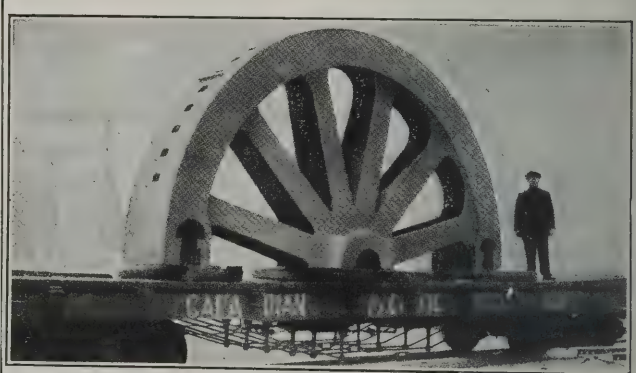
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If an industry earns a profit, no matter how large, that profit must soon or late find its way into the hands of the individual, provided there is no obstacle placed in its way, the excess profits tax being such an obstacle. The individual is entitled to a fair return on his investment, whether that investment be labor or capital, and a fair opportunity to enjoy the rewards of his zeal. But the Government, which protects and makes possible these rewards, may impose an obligation on him. Thus the income tax.

If the Excess Profits Tax is interposed as we have indicated, the profit neither reaches the individual nor has the slightest incentive for being. The excess tax is a burden upon industry at the very point where, for the enrichment of the national treasury, we ought least to burden it and most encourage it. Industry ought to be encouraged to make greater profits, so the Government may have a greater field for revenue. But the Government should not attach the profits as such, but levy on personal incomes as such. In this wise industry is not discouraged from growth and prosperity, revenue flows just the same and with equitable distribution; the stream is made to yield at its mouth instead of at its source.

It seems obvious that an industry taxed directly in its profits speedily will lack ambition to earn beyond a fixed point—the point at which taxation begins. This means lost revenue. For why should a business, governed, as all human activities are governed, by natural impulses, develop energy toward production in which there is no profit? Lacking the incentive to earn, business adjusts its pace to the restrictions, and taxes fall off.

But industry and the individual are animated by somewhat different emotions. An individual might be content to see his personal business slacken if there were no object in earning above a fixed point. Yet if there were no restrictions, no fixed Excess Profits Tax, he would eagerly push his business for the sake of his personal income, for the reason that even though his income tax might be severe, still the more income tax he pays the more he would get for himself. It is evident that any person would rather pay income tax on a million than a thousand.

These taxes, then, income and excess, are chiefly engrossing in consideration of the new revenue bill. Excess tax is likely to mean less excess profits. More excess profit means more income and more revenue. Our revenues ought to be steadily flowing, copious and equitably exacted, always with the view of sustaining in the healthiest and most prosperous condition the processes that provide them.

The income tax takes its toll from industry, through the individual, just as surely as from industry direct; but it encourages the industry to yield always more.

WAR TAXES

(Ottawa Le Droit, Feb. 17, 1920)

Undoubtedly money is needed, but it is crying abuse to maintain exceptional duties voted only for the duration of the war; it helps to keep up the high cost of living.

The same can be said for the war profits tax. Without doubt the excessive profits realized during the war should in part revert to the public treasury, but a single levy should be made on them, they should not be reached by means of a certain percentage deposited periodically, for profiteers will take this opportunity to raise prices, and make up their losses at the expense of the public.

POLITICS AND TAXATION

(Montreal Star, Feb. 14, 1920)

While the most active criticism of the tariff and the most urgent demand for taxation reform comes from the farmers' party, it is worth noting that during the four fiscal years, 1915-19, the agricultural half of the Canadian population paid 29 per cent. of the total increase in taxes and the non-agricultural population more than 71 per cent. The war taxation levied upon the agricultural population was $16 per capita, and upon the non-agricultural population $46 per capita. Direct war taxation during the four years produced $83,768,110. Of this amount the non-agricultural population paid $83,379,099, while the agricultural population paid $389,011, or less than one-half of one per cent. These figures are not quoted in order to discredit the farmers of Canada, nor to create any impresion that the industrial communities were badly treated, but simply to show how the burden



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of taxation is distributed and to establish the incontrovertible fact that no excessive burden has been imposed upon the agricultural population.

But it is almost impossible to impose direct taxes that will not become indirect in their incidence. The excess profits taxes have had consequences which no one foresaw. President Wilson has never been thought to have any unholy alliance with "the interests." Indeed, he has never been regarded with excessive favor by "American business." But he has said "there is a point at which in peace time high rates of income and profits taxes destroy energy, remove the incentive to new enterprises, encourage extravagant expenditures, and produce industrial stagnation, with consequent unemployment and other attendant evils." Mr. Glass, Secretary of the United States Treasury, declares that the excess profits tax, no higher in the United States than in Canada, "encourages wasteful expenditure, puts a premium on over-capitalization and a penalty on brains, energy and enterprise, discourages new ventures and confirms old ventures in their monopolies." He adds: "In many instances it acts as a consumption tax, is added to the cost of production upon which profits are figured in determining prices, and has been, and will so long as it is maintained upon the statute books, continue to be a material factor in the increased cost of living."

Mr. William B. Colver, of the United States Federal Trade Commission—which is denounced by President Nicholas Murray Butler, of Columbia University, for "unwarranted persecution of industrial enterprise"—has described the excess profits tax as "the corner-stone on which the structure of the high cost of living has been erected," because on everything sold "there are from one to fifty excess profits taxes." He continues "The excess profits tax is passed on and multiplied until about four or five dollars is taken out of your pocket, my pocket and the pocket of the man on the street for every dollar that finally gets to the public treasury. The tax is difficult and cumbersome to collect, and bears inequitably upon different concerns of the same size and profitableness. As a matter of fact, it is a bonus for inflated capitalization and a penalty on conservative capitalization. It should be repealed at the earliest possible moment, and its repeal, I am certain, will result in an almost immediate lowering of the whole unhealthy price structure, which is a burden alike upon every citizen, whether he be consumer, merchandiser, producer or taxpayer."

While consumption taxes are denounced in Canada there is an increasing general disposition in Europe to impose such taxes. In various countries of the Old World and in the United States a tax upon retail sales is advocated. Mr. Otto H. Kahn, a leading New York banker, advocates a tax of one per cent. on every single purchase above $2, which he estimates would produce in the United States from $2,000,000,000 to $4,000,000,000 annually. But the object of the moment is not to condemn excess profits taxes, nor to advocate specific changes in the Canadian system of taxation. It seems to be clear that we must have income taxes and corporation taxes, and that those best able to bear taxation must carry a heavy burden. It is, however, idle to suggest, even from the standpoint of revenue alone, that we can yet find substitutes for customs duties which must incidentally afford a considerable protection to Canadian industries. Indeed, if by some decree of Divine Providence, no man in Canada from this time could remember that we ever had a tariff controversy, we would proceed to solve with common consent more of the problems that perplex us and the differences which now divide East and West, and Industry and Agriculture, would not even be whispered at the council table around which the statesmen of the nation would deliberate upon the things vital to its security, stability and expansion.

Business is entitled to an immediate announcement as to whether the Business Profits Tax is to be renewed or not. There are enough uncertainties in the commercial and industrial world to be contended with at the present time without this unnecessary suspense. A few remarks from Sir Henry Drayton would be in order.

—Toronto, *Financial Post*, February 21st, 1920.

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When Canadian Materials are Available at Lower Prices

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CANADA'S INDUSTRIAL EXPANSION

Continued from Page 82

Company Reorganized

Canadian Flax Mills Limited now in hands of a New Set of Officers

Canadian Flax Mills, Limited, are now settled in their new office at 43 Victoria Street, Toronto. While officers of the company have been changed, operations are being carried on as in the past. The company are at present operating six mills, with a monthly capacity of approximately 125 tons of flax fibres and tows, and this production they hope soon to increase. J. M. MacKenzie is now president; John H. Campbell, vice-president and general manager, and F. C. Annesley, secretary-treasurer.

Plant Officially Opened

Factory of Champion Spark Plug Co. of Canada, Limited Has Started Operations

The official opening of the fine new plant of the Champion Spark Plug Company, of Canada, Limited, took place on February 16, Mayor Winter of Windsor officiating. The factory was thrown open for inspection by the public and all day throngs of people passed through. A luncheon for members of the staff and guests took place at the Essex Country Club, and at night the employees dined at the Detroit Athletic Club. The factory is a fine steel and cement structure. All parts of the spark plug, with the exception of the porcelain, are made in the plant, which is the first of its kind in Canada. The plant, when in full operation, will employ about 150 hands and will produce plugs at the rate of 40,000 a day.

Re-open Welland Plant

Canadian Steel Foundries Closing Contract Which Will Lead to Operation of Industry Again

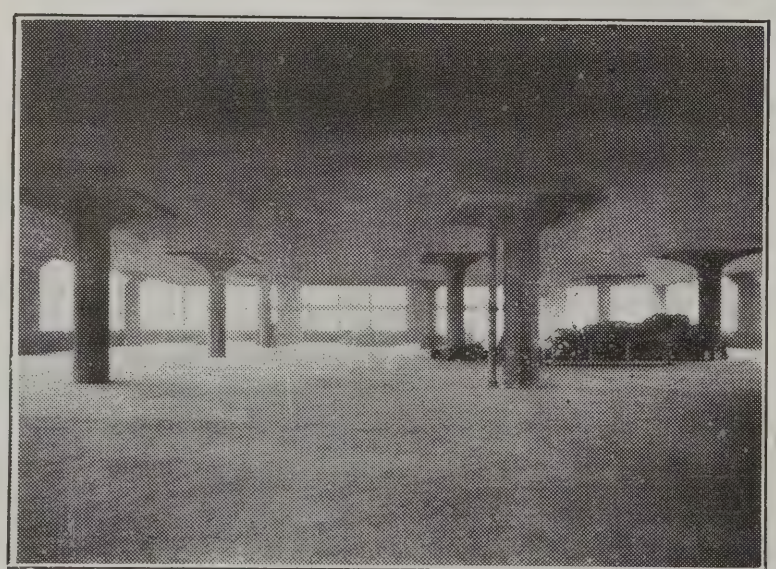
The Welland plant of Canadian Steel Foundries, Limited, which was closed down last summer, will probably be re-opened this spring, according to information received from a reliable source. The company, it is understood, are only waiting to settle the terms of a contract with the Belgian Government for the construction of cars, and the expectation is that this will be settled and executed within the next few weeks. Immediately thereafter the plant will resume operations with a full force.

Move to Owen Sound

Synthetic Rubber & Tire Co., of Canada, Limited, Remove Plant From Toronto

The large stone building in Owen Sound formerly occupied by the Owen Sound Wire Fence Company has recently been taken over by the Synthetic Rubber & Tire Company of Canada, Limited, of Toronto. They are confining their

Hand Your Building Problems to "Sparling Service"



Interior of New Factory of Grahams Limited, Belleville, Ont.

"Sparling Service" shoulders the entire responsibility and by unity of command and concentrated effort your building is completed on schedule time.

"Sparling Service" uses the Richards Patent Truss System in one-story buildings, saving you 20% of the cost of your buildings. This system eliminates 50% of the columns.

Each department of "Sparling Service" is in charge of an expert. The Mechanical Engineering Department being in charge of Mr. C. N. Sparling, who has had 18 years experience in Mechanical Engineering with Bennett & Wright.

"Sparling Service" guarantees Speed, Efficiency and Economy in building construction.

Call "Sparling Service" to your councils. You will get what you want when you want it.

The Wm. F. Sparling Co.

Architects, Engineers and General Contractors

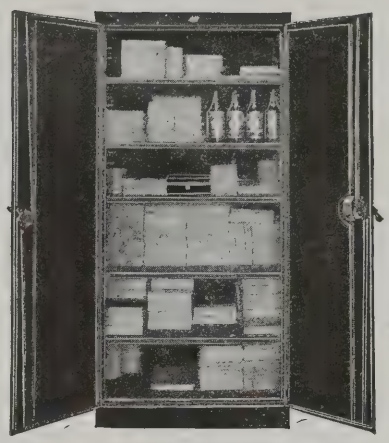
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Adjustable shelves make this cabinet elastic enough to meet all ordinary requirements. We make special cabinets to order for other cases. Yale combination locks, best construction and material throughout.

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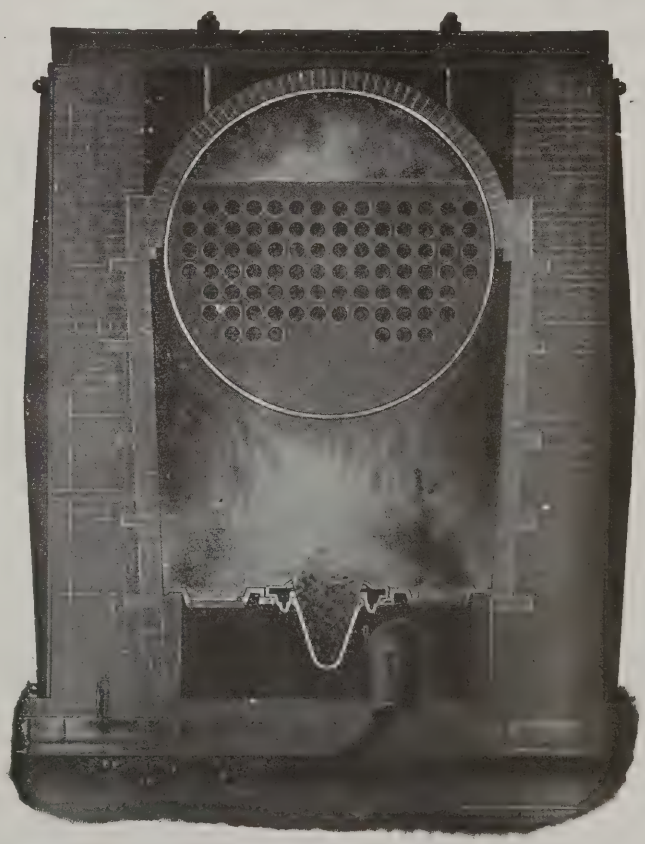
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A wheel for every purpose and satisfaction guaranteed.

Let us send our new Catalog and quote prices.

Dominion Abrasive Wheel Co., Ltd.

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Manufacturers of

PLAIN and LITHOGRAPHED CONTAINERS

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Grocers' Sundries
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Also Toys, Novelties, Tags and Advertising Signs

Well packed is half sold
Make your containers advertise you

Office and Works:
145 Spadina Avenue

operations to a synthetic rubber tire filler, for which they state that orders are in excess of their ability to supply. They believe that the plant is likely to grow into a very large one, but at present can form no estimate as to output or number of hands. Later on they may be able to consider the manufacture of other lines. Henry W. King, Toronto, is president of the company.

Book Large Orders

Canadian Locomotive Co., Limited, Kingston, to Build Thirty-Three Locomotives

The Canadian Locomotive Company, Limited, Kingston, have recently received orders for thirty-three locomotives. Of these, ten 12-wheel locomotives are for the Jamaica Government Railways, and of these three have been delivered; three Mikado locomotives for the Pacific Great Eastern Railway, and twenty switching locomotives for the Canadian National Railways. The company's present capacity is twelve engines per month, so that this will give about three months' work.

Make Three-Storey Addition

Harvey Knitting Co., Limited, Woodstock, Will Increase Output by 25 per cent.

Harvey Knitting Company, Limited, manufacturers of high-grade underwear, Woodstock, are erecting an extension, 66x63 feet, three storeys and basement, which they fully expect will enable them to increase their output by approximately 25 per cent. This is to look after Canadian trade only. The company state that their business has gradually increased on both fall and winter goods for the last five years and two years ago they eliminated their sweater department to allow more floor space for underwear. At present this floor space is fully occupied; hence their reason for building. The business on their books this year shows an increase of approximately 100 per cent. over last year.

Being Rebuilt

Core-Making Department of Taylor-Forbes Co., Limited, Guelph, Damaged by Fire

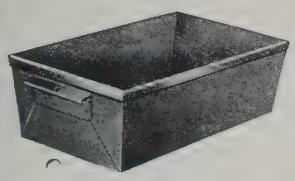
Fire which broke out about 6.30 o'clock on the morning of February 20 in the core room of the Taylor-Forbes Company, Limited, Guelph, did a good deal of damage to the plant. The company state that the fire was reported out at 10 a.m. At 11 o'clock contractors were on the ground looking over the mess, and at one o'clock structural material was delivered and they had men at work. Inside of ten days from the date of the fire the damage was repaired. Meantime the company did not close down and no one was out of work.

Take over Streetsville Plant

The Harris-Wood Products Co., Limited, Start Operations in Existing Building

The Harris Wood Products Company, Limited, manufacturers of Harris System sectional construction, have taken over a plant in the town of Streetsville. They are at present turning out sample houses for England and France and filling a few domestic orders. When these are completed, they intend closing down during the rest of the month of March to install new machinery and erect a new plant. The present floor space is over 4,000 square feet and this will probably

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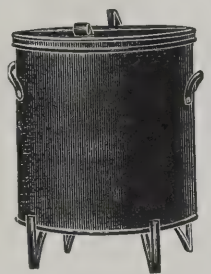


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for Delivery of Gasoline

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THE STEEL TROUGH & MACHINE CO., LTD.
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Let us figure with you for anything made from Sheet Metal, 16 gauge and lighter

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Metallic Shingles, Siding, Ceiling, Corrugated Iron, Ventilators, Skylights, Garages, Storage Buildings, Special Sheet Metal Work
TORONTO AND WINNIPEG

DOMINION BRIDGE CO., LIMITED

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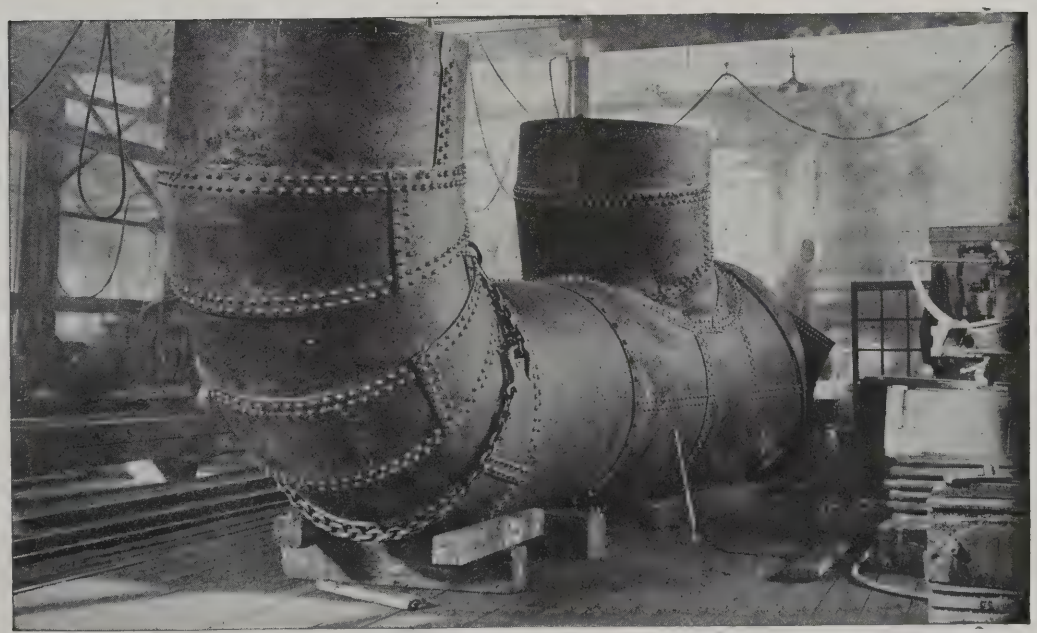
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LARGE STOCK OF STRUCTURAL MATERIAL AT ALL PLANTS



be doubled in the new factory. They have six acres of land, which will allow for expansion. They anticipate doing a large export trade.

Open Canadian Plant

Hall-Thompson Co., of Hartford, Start Manufacturing in New Factory in Montreal

In order to take care of their Canadian business, the Hall-Thompson Company, manufacturers of chemical automobile specialties, Hartford, Conn., have built a factory at 3150 Mance Sereet, Montreal, specially adapted for the work. The building is now completed and they are installing machinery in expectation of starting to operate early in March. Their line is known as the "Wonder Worker" and is confined entirely to automobile necessities, including polishes, dressings, cements, patches, paints, etc.

Double Their Capacity

William and J. G. Grey, Toronto, Erect Five Storey Building to Enlarge Plant

William & J. G. Grey, Toronto, manufacturers of milling machinery, etc., have added a new machinery and manufacturing department to their plant which will about double its capacity. The new building is 90x160 feet, five storeys high, and is equipped with travelling electric crane, freight elevators and all modern improvements. They are also installing in the building some machinery for handling heavy work, including a 96-inch boring mill, weight 65,000 pounds, and other equipment.

Will Remove Plant

Ontario Spring Bed and Mattress Co., London, Buy Property of London Foundry Co.

The Ontario Spring Bed and Mattress Co., manufacturers of beds, springs, mattresses, pillows, brooms, whisks, etc., who are at present located at 88-90 York Street, London, have purchased the property formerly occupied by the London Foundry Co., and are remodelling and refitting the same for their requirements. The new plant differs very little in size from their present plant, but they will have considerable space to take care of their needs for the future. They do not intend to move for two or three months yet.

Hoover Plant Inspected

Banquet Held in Hamilton to Mark Inauguration of Operations in the New Factory

On invitation of the management, the Mayor of Hamilton, members of the board of control, local members of Parliament, the Hydro Electric Commission, and a body of representative citizens, inspected the new plant of the Hoover Suction Sweeper Co. of Canada, Limited, Hamilton, on February 12. The entire process of manufacture was shown. In the evening a dinner was tendered to the visitors and dealers from all parts of the country at the Royal Connaught Hotel. Speeches of a most felicitous character were delivered by Hon. S. C. Mewburn, Hon. W. R. Rollo, Mayor Booker; George H Douglas, Chairman Ontario Division, C.M.A.; H. W. Hoover, general manager, and F. G. Hoover, associate general manager of the parent company in North Canton, Ohio.

With the exception of the motors, all parts of the sweeper are made in the Hamilton plant. At present the staff num-

Fellow Manufacturers



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Lead Pipe
Sheet Lead
Wire Solder
Bar Solder
Ribbon Solder

BABBITT METALS
for all requirements

INGOT METALS
Copper Tin Lead
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EVERYTHING
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Durable—Dependable
ADVERTISING SIGNS

Framed Steel, Wood, Muslin,
Oil Cloth, Folded Edge Fibre,
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COMPANY, LIMITED
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The Grasselli Chemical Co.
LIMITED
Manufacturing Chemists
Toronto, Ontario

Branch Office: MONTREAL, QUE. Works: HAMILTON, ONT.

LABOR COSTS MORE THAN FILES

And it costs more to-day than it ever did before. Don't waste your workmen's time, therefore, with dull files.

Throw them away as soon as the edge begins to go, and buy new ones.

Famous Five Files keep their edge longest. They are made of highly specialized steel, accurately cut and thoroughly hardened.

Specify them when ordering. They are:

KEARNEY & FOOT
GREAT WESTERN
AMERICAN
ARCADE
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Made in Canada by



bers about 100 and the output amounts to thirty sweepers a day. This will be increased to 200 daily in the present plant, with an ultimate output of 500 daily within two years, the additional 300 being for export. The output of the parent plant is 1,200 daily.

Plant Nearly Ready

Factory of Butterfly Hosiery Co., Limited Drummondville Soon to be Operating

The Butterfly Hosiery Co., Limited, a company incorporated under a Quebec charter, and in which some shareholders of the Chipman, Holton Knitting Co., Limited, Hamilton, are interested, have been erecting in Drummondville, Que., a new plant, the main building being about 150 x 50 feet, two stories, with separate dye house, boiler house, etc. The company will make fine gauge goods in cashmere, silk, etc. The factory is nearly completed, and it is expected that operations will commence within the next few weeks.

Hamilton's New Industries

Thirty-two New Plants Were Located in the City During the Past Year

Interesting information about the industrial growth of Hamilton during 1919 is contained in the annual report of C. W. Kirkpatrick, Commissioner of Industries and Publicity. From this report it is learned that during the year thirty-two new industries, representing a total capitalization of $15,670,000, and an employment, when in operation, of 4,700 hands, were located in the city. The value of the industrial building permits issued was $1,614,780, which does not include the Firestone Tire & Rubber Co., whose buildings are just outside the city limits.

"Quite as important as the number of new industries secured," states Mr. Kirkpatrick, "is the number of new lines of manufacture added to the city's already long list. These total upwards of fifty, chief among them being automobile tires and rubber goods, commercial felts, suction sweepers, hosiery needles, carbonated gases, varnishes, etc. The diversity of Hamilton's industries is one of the factors in its steady prosperity, being a safeguard against slumps and unemployment, as it is seldom that all classes of industries are slack at the same time.

"Another interesting feature of Hamilton's 1919 industrial growth was the securing of the city's first Canadian branch of an English manufacturing concern, the Porritts and Spencer Company, of Bury, England. Now that a start has been made, there are good reasons for hoping and believing that other British industries will follow. In fact, I expect in the near future to be able to announce the location here of another very important English concern.

"Eleven of the new industries secured last year are either Canadian branches of American companies or are controlled by American capital, while six others are industries that had located, or decided to locate, in other Canadian cities, but were afterwards induced to come to Hamilton, because of its superior manufacturing and distributing advantages. Notable among the latter is the Hoover Suction Sweeper Company, of North Canton, Ohio, which had an assembling plant at Windsor, but last spring decided to make Hamilton its Canadian and export headquarters, and has since erected and equipped a model manufacturing plant on Gage Avenue, which is a credit to the company and the city.

The list of new industries includes the following companies:

Firestone Tire & Rubber Co., Akron, Ohio; Porritts & Spencer Co., Bury, England; Zimmerman-Reliance Co., Toronto and Hamilton; Hoover Suction Sweeper Co., North Canton, Ohio; Carr Fastener Co., Cambridge, Mass.; Norton Co., Worcester, Mass.; Industrial Varnish Co., New York and Toronto; Beaver Truck Builders, Chicago, Ill.; Quaker City

STEEL BARS

ROUNDS, SQUARES, FLATS, ANGLES AND SPECIAL SECTIONS FOR AGRICULTURAL IMPLEMENTS

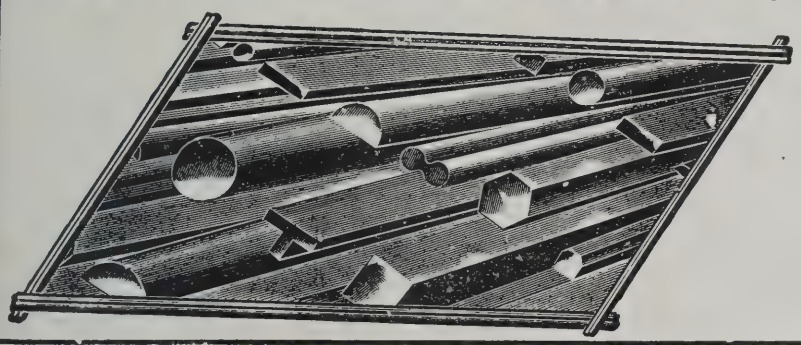
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HAMILTON - CANADA

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MANUFACTURERS OF

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LARGEST STOCK IN CANADA

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WROUGHT PIPE BLACK AND GALVANIZED 1/8 TO 4 INCH

Thoroughly inspected and tested to 600 lbs. pressure and branded

Ask Your Jobber for



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Also BOLTS, NUTS, RIVETS—All Kinds

PRESSED SHIP SPIKES, BLACK AND GALVANIZED—All Sizes

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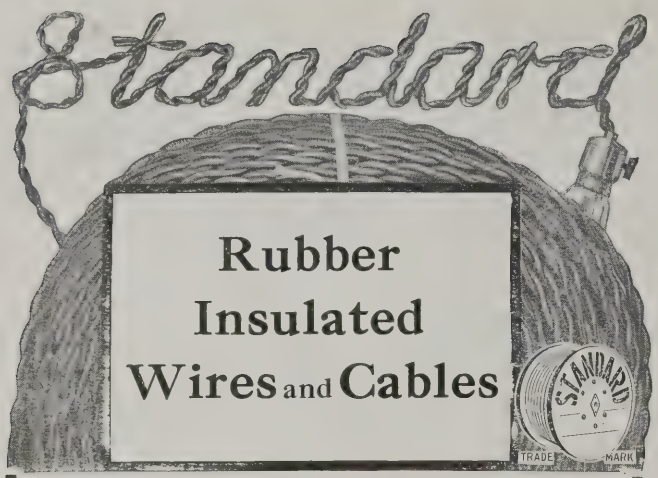
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Wires, Wire Nails, Wood Screws, etc.

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include a wide variety of types and sizes to meet every condition of service. These types include, in addition to wire for ordinary interior wiring, a complete line of special make-ups such as Brewery Cord, Theatre Cable, Elevator Cable, Tree Wire, etc.

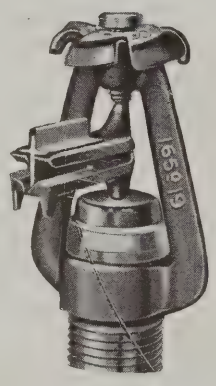
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Chemical Co., Philadelphia, Pa.; Concrete Pipe & Products Co., Welland, Ont.; Gerrard Wire Tie Co., New York, N.Y.; The Lynat Co., Philadelphia, Pa.; McCoy Auto Lock Co., Buffalo, N.Y.; Shino Co.; Metal Studios Co.; MacPherson Mfg. Co.; Superior Cap Co.; Empire Meter Co.; Barton Electric Co.; Nicholson Cement Products; Hamilton Bedding Co.; Grierson Candy Works; McLean Machine & Tool Co., Niagara Falls, N.Y.; McAlpine Tobacco Co., Toronto, Ont.; Mazda Lamp Co.; Star Cone Co., Baltimore, Md.; P. W. Corey Needle Co., Paris, Ont.; British American Oil Co., Toronto, Ont.; Dominion Canners; Hamilton Lamp Co.; Canadian Carbonate Co., Montreal, Que.; Abrasive Co., of Canada, Bridesburg, Pa.

Option at Toronto

[Semet-Solvay Co. Get Option on Twenty Acres for By-Product Coke Oven Plant]

The Semet-Solvay Co., Syracuse, N.Y., confirm the report that they have secured an option on twenty acres of land in the eastern industrial area of the Toronto Harbor Commission, with the intention of possibly utilizing it for the erection of a by-product coke oven plant. They are not prepared, however, to give any further information about their plans at the present time.

The Kelsey Wheel Co., Limited, manufacturers of auto wheels, hubs, rims and stampings, Windsor, are erecting a new building, 50 x 150 feet, to be used principally as a galvanizing and pickling plant.

Production of vegetable parchment paper was started by the Canadian Vegetable Parchment Co., St. Catharines, at their new plant, on February 12. Ground for the construction of the plant was broken in August last.

Firstbrook Bros., Limited, manufacturers of boxes and shooks, Toronto and Penetang, are at present erecting a small box shook plant at Thessalon, Ont., which will probably be in operation about May 1. At least fifty hands will be employed.

The Laidlaw Bale Tie Company, Limited, Hamilton, are erecting a building 210 x 40 feet, one story, saw-tooth construction, which will be used principally to relieve congestion in their present premises, though it may result in an increased output.

Tallman Brass & Metal, Limited, Hamilton, have purchased 14 acres of land on Burlington St. They have no intention of making any plant extension at present, but have secured the land so as to be prepared for enlargement whenever it becomes necessary.

The Tolton Manufacturing Co., manufacturers of "Quality Trousers," Guelph, Ont., are now a limited liability company. Mr. William Tolton, the president, states that no new capital has been taken in, nor is it the intention to extend the business other than through natural growth.

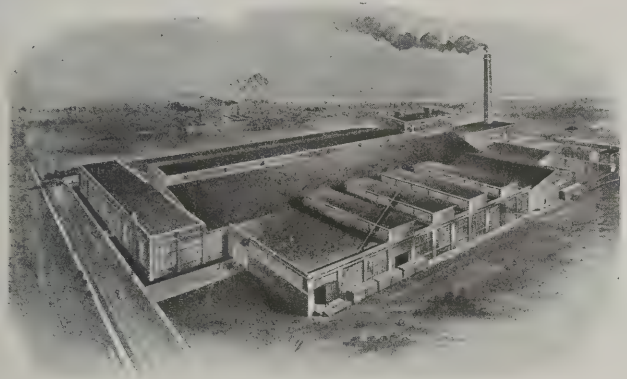
Merner Bros. are establishing a flax mill, with a capacity to work up from 300 to 400 acres of flax, in Clinton, Ont., and expect to have it ready for operation for the 1920 crop. J. J. Merner, of Merner Bros., is at present operating a mill of the same capacity in Seaforth, the style of the firm being Merner and Fell.

The Toronto Putty Co., specializing in the manufacture of all grades of putty, have started operations at 17 Jarvis Street, Toronto. The capacity of the plant is about a ton and a half a day, but plans are already being considered for enlargement of its capacity. The industry was started on January 1.



For Wire Rope of Durability
use
"DOMINION"

The Dominion Wire Rope Company, Limited
Toronto Montreal Winnipeg



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Cold Drawn, Cold Rolled
Turned and Polished Steel
FINISHED KEYS

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Locomotive Turn Tables. Roofs, Steel Buildings and Structural Iron Work of all Descriptions

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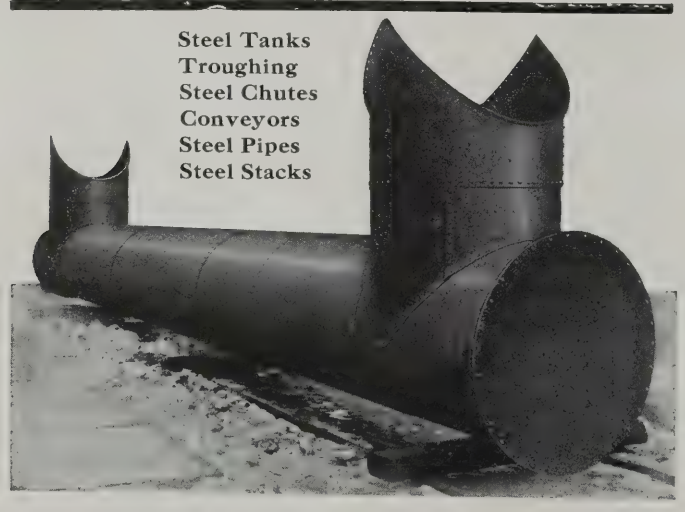
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BRANTFORD, ONTARIO, CANADA

Deaths Among Prominent Manufacturers

A Veteran Stationer

Death of Richard Brown Removes Grand Old Man of Stationery Manufacturing Industry

For sixty years the late Richard Brown, whose death occurred in Toronto on February 14, was head of the manufacturing stationery firm of Brown Bros., Limited. He was indeed the Grand Old Man of the industry and, until quite recently, even after he had passed his eightieth birthday, took an active, everyday interest in the business. Born in Newcastle, England, eighty-six years ago, he came to Toronto at the age of twelve, and was a resident of the city ever since. During his long career, he saw the business, which he helped to start, expand from a small beginning to its present large proportions, with *clientèle* extending from Atlantic to Pacific.

Was Prominent Canner

David Marshall, M.P., Was Long Associated with Canadian Canning Industry

The career of the late David Marshall, M.P. for East Elgin, whose death occurred quite suddenly at Vancouver on February 14, was an interesting one. Born at Eden Mills, near Guelph, in 1846, he was brought up on a farm. For some time he was employed at scaffolding work in the Petrolea oil fields, and then formed a partnership for the operation of a threshing outfit. He continued at this work for five years, when he established a shingle factory. Three years later he bought out a grocery business in Aylmer, which he conducted for ten years. He was one of the promoters and for twenty years manager of the Aylmer Canning Co., which was eventually merged in the Dominion Canners. Of the latter, Mr. Marshall was for three years general manager, and, at the time of his death, a director. He was also one of the promoters of the Aylmer Condensed Milk Co., being president until the business was purchased by Carnation Milk Products Co.

Interested in Many Industries

Late Edward L. Goold, of Brantford, was closely associated with city's industrial life

On February 16 there passed away, at Brantford, Mr. Edward L. Goold, president of the Goold, Shapley & Muir Company. Mr. Goold was closely identified with the industrial life of the city. His father came to Brantofrd in the early forties, and as far back as 1850 the firm of Goold, Bennett & Company, iron and brass founders, was quite a flourishing concern. Mr. Goold, Jr., went as a young man to Chicago, where he was for a short while with Marshall Field & Company. It was not long, however, before he returned to Brantford. He first of all became senior partner of Goold & Agnew, stove and hardware merchants, and in 1881 joined the firm of J. O. Wisner, Son & Company, manufacturers of cultivators, harrows and other farm implements. After the absorption of this business by the Massey-Harris Company, Mr. Goold threw himself into the manufacture of bicycles, having with him as partners Messrs Shapley and Knowles. This industry reached large proportions, employing at one time 600 hands. Ultimately the

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business was sold to the Canada Cycle & Motor Company. Further back than this, Mr. Goold had established Goold & Company for the manufacture of beekeepers' supplies and refrigerators. Messrs. W. H. Shapley, John Muir and E. Yeigh later joined with him, and the outcome was the firm of Goold, Shapley & Muir Company. Mr. Goold was also president and main promoter of the Brantford Oven & Rack Company; one of the leading spirits in the establishment of the Brantford Screw Company, now merged in the Steel Company of Canada; the president of the Beaver Oil & Gas Company, and interested in many other companies.

Was Expert Steel Maker

Late Captain David Kyle, M.C., Vice-President Algoma Steel Corporation, Held in High Esteem

In the death of Captain David Kyle, M.C., vice-president of the Algoma Steel Corporation, which occurred at the Sault on February 1, the company has lost a valuable official. The late Captain Kyle was born in Scotland, and came to the Sault in 1910 as engineer in charge of the construction of the merchant mill, and was later in charge of the construction of the gas engines. When that work was completed he joined the staff of the steel plant, and was placed in charge of maintenance.

In 1912 he was made general superintendent of operations, and in the fall of 1914 left the service of the company and went overseas and served in the war, during which he won the Military Cross. In 1917, by special arrangement with the military authorities in London, Captain Kyle was allowed to come back to Canada, and again take his place in the executive offices of the steel company, and two years ago, when Mr. Franz came back to the Sault from Cleveland, Captain Kyle was elected a director and vice-president of the steel company. Mr. Kyle was about thirty-six years of age, and his death brings a distinct loss to the steel plant and to the city.

B.C. Box Manufacturers

An Organization Formed at the Coast as a Section of the Canadian Manufacturers Association

As the outcome of a meeting of the box manufacturers of British Columbia, a decision was reached to affiliate themselves with the Canadian Manufacturers Association and form a Box Manufacturers' Section. The section starts out with a membership of nine manufacturing firms out of a total in the province of seventeen, and it is hoped before long that the others will come in.

The objects for which this section was formed are the building up of the export trade of box shooks in the province, and the maintenance of standards in sizes and quality of packages for various commodities shipped from the province, the principal of which are fruit and fish. There is also a big demand for box shooks in the United Kingdom, South Africa, Australia, New Zealand, Mexico and South America, and it is felt that by getting together they will be in a better position to meet the transportation difficulties in connection with this export trade.

The officers of the section are: R. B. Sharp, of the Pacific Box Co., Vancouver, Chairman; W. B. Mitchell, of the Cameron Lumber Co., Victoria, and D. Lloyd-Jones, of the Kelowna Saw Mill Co., Vice-chairman; J. H. McDonald, of the British Columbia Manufacturing Co., New Westminster, Treasurer; Hugh Dalton, Secretary.



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Catalogues and Booklets

Pratt Ballast Cleaner

A new development in the line of link-belt labor-saving machinery is described in a folder just issued by the Link-Belt Company. This is the Pratt Ballast Cleaner, a machine for use on railways, which speeds up ballast cleaning and at the same time reduces labor cost. The machine is described in detail, with a number of explanatory illustrations.

Sectional Construction

The Harris Wood Products Co., Limited, Toronto, issue an attractive catalogue, illustrating and describing their system of sectional frame construction. This system applies bridge-building methods to all manner of frame construction. Houses, etc., are built in standardized, interchangeable sections, these sections being complete in themselves and of a size convenient to handle. Also the buildings can be put up most economically.

High-Class Art Work

Small scale productions in full colors of the three Victory Loan posters, designed by the Art Department of Rous & Mann, Limited, Toronto, have been sent out by this company in a handsomely prepared folder, for the purpose of demonstrating the character of the work of which the Art Department is capable. The designs and workmanship afford convincing evidence of the capabilities of the company, both in the creation and execution of advertising designs.

Anglin-Norcross Calendar

A neat little calendar, the feature of which is a series of illustrations of fourteen buildings erected by the company, has been sent out by Anglin-Norcross, Limited, contracting engineers, Montreal, Toronto and Halifax. Several industrial plants are included in the series.

Electric Steel Furnaces

Catalogue No. 2 of the Volta Mfg. Co., Limited, Welland, contains an interesting foreword on the growth of the electric steel industry, followed by a complete description of the "Volta" furnace. At the end of 1919 it is estimated that 815 electric furnaces were in operation or installed throughout the world for the production of electric steel ingots and castings, of which number 330 are in Canada and the United States. In 1910 there were only 114 furnaces, of which 13 were in Canada and the United States. The production of electric steel castings has been very marked, while it is readily seen that the electric furnace is rapidly replacing the crucible process.

Seventy-Year Development

With the title "Inter-related Industries," the Grinnell Company, Inc., have produced a handsomely designed booklet, giving a brief story of the seventy-year development of several inter-related industries, founded on industrial piping. It is explained at the outset that the company's former name, the General Fire Extinguisher Co., was misleading in that it connoted fire protection, whereas the company was also a producer on a large scale of heating, power piping and specialties, drying, etc. The history of the organization, from its inception in 1850, is traced and its various productions explained. The plants operated, including those of the Grinnell Co. of Canada, Limited, at Toronto and Montreal, are illustrated, and altogether a most comprehensive idea of the activities of the company are given.

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Canal St., East, Dunnville, Ontario, in 1915, before the use of Tarvia.



AFTER
The same street after three years of service. Note its perfect condition.

Dunnville turns to Tarvia

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The Canadian Manufacturers Association
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Editorial Comment

A Great Canadian Industry

IN point of value of output, the agricultural implement manufacturing industry is well known to rank high among the industries of Canada, and creditable indeed has been the way in which those responsible for its well-being have carried it forward to its present large dimensions. The reputation of Made-in-Canada farm implements is world-wide in extent, while at home the importance of the industry in the industrial fabric of the country is such as to deserve general recognition.

The present status of the industry is reflected in the figures recently issued by the Dominion Bureau of Statistics, applying to the year 1918. These taken in conjunction with the figures of 1910, provide some interesting comparisons. It is to be noted that in the eight-year interval, the number of plants has grown from 77 to 84, while the capital investment has grown from $45,232,098 to $74,410,603. Of this the investment in land, buildings and plant showed a growth from $9,621,256 to $13,528,395.

Oddly enough the number of employees has been nearly stationary. The 1910 figures gave 726 employees on salary and 8,834 employees on wages, a total of 9,560. In 1918 there were 865 employees on salary and 8,782 employees on wages, a total of 9,647. But the startling change has been in the amount of wages paid. In 1910 wages only amounted to $4,739,750 or $536 per head; in 1918 they had risen to $8,632,201 or $982 per head.

The cost of materials was figured at $10,477,140 in 1910 and at $17,319,840 in 1918. The value of products stood at $20,722,722 in 1910 and at $34,853,673 in 1918.

Interesting figures are given in the 1918 report as to the quantity and value of various materials entering into the manufacture of implements and as to the number and value of each kind of implement made. For instance 30,367 m.f. of lumber; 77,338 tons of steel and steel castings; 49,712 tons of pig iron and iron castings and 14,351 tons of malleable iron were required.

So far as output was concerned, 117,226 harrows were made; 70,522 plows; 37,751 mowers; 35,467 cultivators; 31,270 drills; 30,435 harvesters; 24,556 hay rakes; 11,801 hay carriers; 10,025 fanning mills, etc.

A GREAT TRIP

No member of the Canadian Manufacturers Association, who can possibly afford the time, should fail to enroll himself among those who will take in the trip to the Pacific Coast and attend the 1920 Annual Convention in Vancouver and Victoria, on June 8, 9 and 10. No more favorable opportunity for seeing the West and meeting western manufacturers under the most pleasant conditions could be imagined. It will be a trip well worth while.

Lightning Rod Installations

AMONG the contents of the current issue will be found an article by Prof. W. H. Day on the subject of lightning rods, which is published on instructions of the Insurance Committee. In this connection it may be interesting to note that a bill has been drafted by the Ontario Fire Prevention League and submitted to the Provincial Cabinet, the purpose of which would be to control the sale of lightning-arresting systems and to make the use of lightning rods on certain specified structures obligatory.

While it is uncertain what action if any will be taken by the Government with regard to this proposed legislation, it may be stated that in its tentative form the bill is decidedly drastic in character. For example, it would render it compulsory to rod all buildings 60 feet in height or over, a provision which would apply to many city structures. However serious the risk may be in the country, it is open to question whether it would be worth the cost to protect city buildings as specified. There should clearly be some differentiation in this respect.



A Famous Hostelry

This is the Empress Hotel, overlooking the beautiful harbor of Victoria, B.C. and basking in the genial sunshine and balmy air of the Pacific Coast. Here the C.M.A. will have its headquarters on June 10, when the annual banquet takes place in Victoria.

So far as the sale of apparatus for the protection of buildings from damage by lightning is concerned, the provisions are equally severe. Licenses from the Provincial Fire Marshal must be obtained and a bond of $10,000 provided. A fee of $50 is required to secure the license, while a tax of 80 cts. on every $100 received from the sale of lightning rods and equipment will be levied. Strict conditions surround the transaction of business in order to ensure that the systems installed will be efficient and the work properly executed. The general idea underlying these conditions is good but it will possibly be questioned whether equally satisfactory results might not be obtained by making the restrictions less arduous.

Farmers and Boards of Trade

THE action of the Guelph Chamber of Commerce in securing the admission of farmers to membership, reference to which was made in our last number, is by no means an isolated instance of an effort to get the business men of the farms and the business men of the cities together. A correspondent, Mr. Russell T. Kelley, President of the Hamilton Advertisers' Agency, Limited, says:

"Over two years ago the writer had the honor of organizing a Farmers, or as we call it an Agricultural Section in the Hamilton Board of Trade. We have about one hundred and thirty members. They have a luncheon one Saturday each month and the average attendance has been over one hundred. We always have a number of Hamilton business men present in addition to the farmers.

"Addresses are given on subjects of vital importance to the agriculturists, and this Department of our Board of our Board of Trade is considered to-day one of our most important. It has done a wonderful work in bringing about a better understanding between the urban and rural citizens.

"Personally, I believe that an effort should be put forth to establish similar departments in the various Boards of Trade and Chambers of Commerce in Ontario. Just four weeks ago I had the pleasure of having a part in organizing the Agricultural Section of the Stratford Chamber of Commerce."

This is fine work and should merit the commendation of all people who are desirous of seeing the best possible spirit of co-operation engendered among all sections of the community. It is desirable, as Mr. Kelley says, that other boards of trade should take similar action to that of the Hamilton, Guelph and Stratford boards.

The Claims of the Canadian Architect

EVERY reasonable effort to make the Made-in-Canada campaign thoroughly consistent should be practised by its sponsors and supporters. It should unquestionably be a well-rounded and comprehensive scheme to maintain and enlarge the business and industrial activities of the nation. Nor should it be limited to the buying and selling of commodities. It is quite as deserving of recognition in the case of the professional man, who is contributing his quota to the upbuilding of the country.

The business and professional elements come into close contact in the case of the architect. Not only does the architect create, but he also has a great deal to do with prescribing methods and materials. To urge upon him the desirability of using Canadian-made materials in the erection of buildings is important but it is equally important that the men or companies who are erecting buildings should give a preference to the Canadian architectural profession in arranging their plans. The brains of Canadians are as deserving of recognition as the products of Canadian factories, and when new construction is contemplated, the consistent course to pursue will be not only to requisition the use of Made-in-Canada materials but to insist on the employment of Canadian architects and contractors as well.

Workmen's Compensation in British Columbia

IT is apparent from a perusal of the 1919 report of the Workmen's Compensation Board of British Columbia that the Board has finished a third successful year. It is a noticeable feature that the administration of the Act is appreciated by all parties concerned; the employer, inasmuch as he is no longer bothered by litigation that was so common in the olden days; the workman because he quickly receives his compensation without dispute; the medical man, because his bills are paid promptly; and the

hospitals, because accounts incurred in connection with hospital treatment of workmen are promptly paid.

The first aid regulations, which were brought into effect some two years ago, have proved particularly efficient, inasmuch as a very large number of minor injuries receive first aid treatment, and the result is that the consequences from lack of attention and failure to obtain medical treatment, are no longer serious.

Compared with 1918 the 1919 industrial activities of the province show that 500 new employers are now engaged in industries covered by the Act that were not in operation before. Over 110,000 workmen are covered, and the 1919 payrolls of the industries covered by the Act amounted to approximately $130,000,000.

The rates charged by the Board are considerably less than were charged industries heretofore. This is only possible by reason of the Act providing for the administration of the accident fund by a board appointed for that purpose and to the exclusion of all intermediaries. Notwithstanding the increased volume of business, the charge to employers was only 4.781 per cent. of the amount collected from them, being slightly less than the ratio of expense during either of the previous two years. Of every $100 collected from the employer, $95.21 goes direct to the workmen or their dependends without any expense whatever to them.

By a 1919 amendment to the Act, the pensions paid to dependents residing in foreign countries were revised according to the cost of living in those countries as compared with the cost of living in Canada. The surplus so obtained by such amendment was divided among the dependents of deceased workmen residing in Canada. This meant a total payment to the dependents in Canada of $65,870.51, with the result that after the first six months' operation of the Act, all widows have been receiving $35 per month and each child $7.50 per month.

During 1919 a total of 18,185 claims were made upon the Board. Of this number 17,908 were non-fatal claims, and 277 were fatal. Of the 277 fatal claims made, 93 were in respect of accidents happening during 1918, leaving 184 men fatally injured during 1919. This represents the lowest number of fatal accidents during any of the past years. The Board points out that in comparison with previous years, it is noticeable that the percentage of accidents to the number of workmen covered is considerably lower not only in number but in extent of severity and time loss.

During the past three years there has been paid out in compensation, pensions, and reserves, $4,209,468.94. There has been paid out for medical aid, hospital and nursing, $620,761.46; making a total paid out for compensation, pensions, reserves, medical aid, etc., of $4,830,-











Little Glimpses on a Famous Route

From Edmonton to Vancouver, the C.M.A. Excursion Party will travel via the Canadian National Railway. Along this route through the Yellowhead Pass and down the North Thompson and Frozen River Valleys there is some grand scenery, snatches of which are shown in the illustrations above.

230.40. During 1919 there was paid in compensation, pensions and reserves $1,391,993.35. The amount paid for medical aid, hospitals, and nursing was $289,108.39 or a total for the year of $1,681,101.74.

The Delusion of the Class War

THE Moose Jaw *News,* in referring to the recent discussion by the British Columbia Federation of Labor of a resolution in favor of a Soviet Government, quotes most appositely an article by Robert Blatchford, the well-known English socialist, entitled "Tosh About the Class War." It takes such a commonsense view of the situation and so completely exposes the delusion that classes can be obliterated, that we are tempted to repeat the *News'* condensation of its argument.

"I think it is time somebody who understands Socialism and the British people," he says, "said a few words of cool commonsense about that weird chimera—class war. The idea behind the class war, as exploited by the blood and thunder apostles of 'direct action' is that the 'working class' or 'Labor' is robbed and repressed by the upper and middle classes, and that the only hope of the working class, or Labor, lies in overcoming the upper and middle classes by force and then robbing and repressing them in turn." But, he asks, where do we all stand? Who are we to fight? To these questions he replies that "it is the habit of the 'direct action' blowhards to speak of the classes as though the whole nation were rigidly divided into three castes, as the Army is divided into officers, non-commissioned officers and privates. If that were so, the meaning of the class war would be clear. It would mean that the privates wanted to be officers and non-commissioned officers, and reduce the present officers and N.C.O.'s to the ranks. . . . It may be useful to point out that all the privates could not become officers or even sergeants, and that to change the individuals of the classes is not to abolish the class system. Or, if such be the idea, to abolish all ranks in the Army, would be to abolish the Army." What is a working man? he then asks. "A working man is a man who works." Therefore, he contends, "editors, doctors, bank clerks, engineers, managers and salesmen, captains of the mercantile marine, designers, artists, musicians, are all working men. Then upon what grounds of logic do the mechanics and labourers claim to be the working class and to exclude other working men and denounce them as enemies in the class war?"

From this he draws the following very straight deduction. "Now what does the inflammatory orator mean us to understand when he talks about the 'workers' or the 'working man' or 'Labor?' He wants to impress us with the idea of some thirty millions of manual workers, all users of tools, all 'wage slaves,' and all united in their interest and desire against the classes. This imaginary army of emancipation does not exist. I do not believe it ever will exist in our country. This hypothetical 'class' sometimes spoken of as the proletariat, is not a coherent class at all. It is a mass of people divided into classes and sects more arbitrarily than the nation's division into three classes. 'Labor'! There are male and female labor. Are these at one? Do not the engineers love to be called the 'aristocracy of labor?' Do the best-paid and most highly skilled crafts believe that the mere laborers should equal them in rank and wages? If the skilled worker is exploited by the employer, then the laborer is exploited by the skilled worker. If the whole 'proletariat' are justified in 'direct action' against the 'classes,' the laborers would be justified in 'direct action' against the skilled workmen. The women would be justified in 'direct action' against the men."

Why, he says, even the "Soviets have bosses." "Suppose the 'proletariat' hanged or deposed, the whole of the upper and middle classes and decided to run the country by soviets, there would arise the question of the composition of these soviets. There would have to be directors, and managers and foremen. Would the very best men surely get those jobs? Would they be better than the men displaced? Would there be no danger of the directors, managers and foremen solidifying into classes? I should be very reluctant to live in England under the rule of soviets. If the soviets were to be controlled by the garrulous, malignant bounders who are at present shouting for soviet government, I would very much prefer to be decorously hanged. And I am a democrat, and a Socialist, and a working man, and don't you forget it."

A Reduced Fire Waste

STATISTICS recently issued by the Fire Marshal of Ontario indicate a really remarkable reduction in the fire loss of the Province for 1919. While the number of fires was not markedly less, the wastage in dollars and cents showed the very decided decrease of $6,182,762 or 40 per cent. For all Canada, the reduction in fire waste was 27 per cent. and for the whole of North America, 15 per cent., which gives to the Ontario figures all the greater significance.

Analyzing the figures, it is to be noted that, while the reduced loss in Ontario applied to practically all classes of risks, the bulk of the saving occurred under the heading of factories, and manufacturing and special hazards. Here there was a reduction of approximately five million dollars or 85 per cent. of the total. Various reasons will doubtless occur to account for this improvement. The cessation of the manufacture of munitions was undoubtedly one potent factor. So also would be the mild weather conditions of the winter of 1918-1919, which lessened the risk from over-heated pipes. Apart from these considerations, however, credit must unquestionably be given to the progress of the educational movement. More care is being taken. Protective measures are more adequate and the fact that replacement values have increased enormously has had its influence on the situation. In short, a real gain has been registered, which should give encouragement to the forces battling against the appalling fire waste of the country.

A WORD of appreciation of the services so zealously performed by the Ontario Safety League in its campaign of educational effort is well deserved. A glance over the brief synopsis of work done in 1919 is sufficient to show how widespread is the propaganda being conducted by this organization. Cards, letters, bulletins, seals, pay envelope slips, by the hundreds of thousands, have been distributed and, while much of the material has doubtless fallen on barren ground, yet enough must have taken root to produce worthwhile results. The careless and indifferent are always with us, but the persistent preaching of the Safety League will in time have its effect and manufacturers may well wish more power to its arm.

News and Views of the Association

There will be found each month in this department a record of the various activities of the Canadian Manufacturers Association during the preceding month. The information is supplied to INDUSTRIAL CANADA officially, and all members of the Association are urged to acquire the habit of reading and checking over the contents of the department carefully in order to keep themselves posted on the work of the Association

Will Require Several Special Trains

THERE is every likelihood that it will require several special trains to handle the Association's Excursion to the Pacific Coast in June. At time of writing, reservations for the first train out of Toronto on May 29th have been practically completed. That there will be a second train from Toronto is pretty well assured, while a complete train will probably be necessary to accommodate Quebec and Maritime members, leaving Montreal. The success of the Excursion, as well as of the Annual Meeting, is well assured and those members who have still to make a decision about going are urged to do so at once. This will ensure accommodation and be of assistance to the management.

Executive Council Meeting

The March meeting of the Executive Council took place at the Windsor Hotel, Montreal on March 25, following a luncheon held under the auspices of the Quebec Division. The president, Mr. T. P. Howard, was in the chair and there was a good attendance of members. Business of much importance was transacted, including the reception of reports from the various standing committees. The Council went on record as in favor of daylight saving.

The April meeting of Council will be held in Toronto on the usual date, the fourth Thursday of the month.

Membership Continues to Grow

The membership drive inaugurated last December continues to pile up encouraging totals. Between December 1 and March 31, 545 new members have been added to the roll, bringing the total membership of the Association up to approximately 4,100. The new members are divided among the five divisions as follows: Ontario, 205; Quebec, 180; Maritime, 77; Prairie, 42; Pacific, 41.

Edmonton Branch Annual

The Edmonton Branch of the Association held its annual meeting on March 10, G. W. Hall, manager of the Edmonton City Dairy, was elected chairman; C. G. Robson, president of W. H. Clark Co., honorary secretary, with the following executive committee: Harvey Shaw, North-West Biscuit Co.; C. A. Graham, Great Western Garment Co.; J. T. Molitor, Swift-Canadian Co.; J. A. Bullman, Alsip Brick Co.; C. G. Sheldon, Humberstone Coal Co., Limited. From this it will be seen that the Edmonton Branch has been fully resurrected and is now firmly established.

Ontario Division Annual Meeting

A circular has gone out announcing that the annual meeting of the Ontario Division will be held at the King Edward Hotel, Toronto, on Thursday, April 29. Proceedings will commence with a luncheon at 12.30 p.m., after which business will be transacted, continuing until disposed of. Reports of officers and committees will be presented and officers for the coming year elected. Nominations will be received up to April 17th, at 3 p.m. As important matters will come up for consideration, a large attendance of members is desired.

Toronto Branch Annual Meeting

The annual meeting of the Toronto branch is scheduled to take place on April 29, immediately following the annual meeting of the Ontario Division. It will probably start about 4 p.m. Dinner will be served at 6 p.m., after which business will be resumed and continued until disposed of. As in the case of the Ontario Division, the usual reports will be presented, officers elected, etc.

National Fire Protection Association

Announcement is made that the twenty-fourth annual meeting of the National Fire Protection Association, which met last year in Ottawa, will be held in the Auditorium, Insurance Exchange, Chicago, on May 4, 5 and 6. Members who intend attending the convention, are being urged to make their hotel reservations as early as possible.

Canadian Trade Index

The Commercial Intelligence Department are directing the attention of members to the early appearance of the 1920 edition of the *Canadian Trade Index*. A circular states that "This is the outstanding publication of its kind in Canada, that it is compiled, published and owned by your Association, and is the only publication of its kind that is in any way authorized or endorsed by your Association.

"Its national character and scope are recognized by the Dominion Government, whose departments and overseas representatives will be fully supplied with it for purchasing and publicity purposes.

"This issue will also be carefully distributed to all large buyers of goods throughout Canada, and copies will be placed for reference purposes in all localities.

"Special pains are being taken to ensure a thorough and adequate circulation in all countries where Canadian manufacturers are doing business or may hope to do business.

"All this circulation is backed up by an information service such as no other organization in this country has facilities for rendering.

"This is your own proposition. It has been backed up well by your advertising support. We believe our efforts in achieving a thoroughly representative domestic and exports circulation will warrant a continuance of that support in the event of the publication of the *Index* annually, which is now under consideration."

Industrial Alcohol

A deputation consisting of Messrs. T. H. Wardleworth, of the National Drug & Chemical Co., Montreal; T. F. Monypenny, Imperial Varnish & Color Co., Ltd., Toronto; Mr. Haldane, Sherwin-Williams Co., Ltd., Montreal; G. M. Edwards, Canadian Paint, Oil & Varnish Association; Messrs. Hickman & McLaren, Ottawa Paint Works; W. A. Oliver, of J. Oliver & Sons, Ltd., Ottawa; J. F. Edgar, Synthetic Drug Co., Ltd., Toronto; J. E. Walsh, E. Blake Robertson and J. M. McIntosh, of the Canadian Manufacturers Association, waited upon the Hon. The Minister of Customs and Inland Revenue and the Hon. The Minister of Finance on Friday the 26th March, and urged the enactment of legislation which will provide for the manufacture and sale of industrial alcohol for manufacturing purposes. There is now an alarming shortage of methylated spirits, and the output of many manufacturers is seriously handicapped. The enactment of the legislation proposed will place Canada on a level with British and American competitors.

Death of F. R. Allward

Members of the Association, who read with interest the series of articles on the handling of freight claims, which appeared in recent issues of INDUSTRIAL CANADA, will be sorry to learn of the death of their author, Mr. F. R. Allward, Chief Clerk of the Transportation Department. Mr. Allward was one of the most conscientious and painstaking officials of the Association, who brought to his work a zeal and thoroughness that were above praise. He was a young man, who devoted his leisure hours assiduously to self-education and was steadily and earnestly making himself a master of transportation problems through the medium of correspondence courses. Starting in the service of the Grand Trunk Railway, he became later traffic officer of the Quaker Oats Company in Saskatoon. He enlisted for military service, but through exposure at Camp Borden, contracted an illness which prevented his going overseas. In fact, it was through the debility occasioned by this experience, that his constitution was unable to resist the attack of the flu to which he succumbed on March 19th last. His death is a distinct loss to the Transportation Department and through it to the Association in general.

Chocolate Manufacturers in the West

A party consisting of Mr. H. P. Cowan, Cowan Co., Ltd.; R. P. Smith, Wm. Neilson, Ltd.; E. A. Chidley, Willard's Chocolates, Ltd.; Alex. Norman, Rockland Chocolate Co.; George W. Robertson, Robertson Bros., Ltd.; and C. J. Bodley, Secretary, Confectionery, Biscuit and Chocolate Industries of Canada, have recently returned from an extended tour of Western Canada. The itinerary included Winnipeg, Brandon, Regina, Moose Jaw, Saskatoon, Edmonton, Calgary, Vancouver and Victoria. At each of these cities meetings were held, the purpose of which was to assist the confectionery jobbers' associations of the various districts to a fuller realization of their objects. Price-cutting and many unfair methods of competition have tended, in the past, to make much dissatisfaction. The chocolate bar manufacturers, represented by the above men, were able to assure the Western dealers of their co-operation on all contentious matters.

One great benefit that will grow out of such meetings is a better understanding between the East and West—(so called.) The various cities seemed to vie with each other in the warmth of their welcome to the manufacturers, and many expressions of satisfaction were expressed that the delegation had come to visit them, and to study the problems confronting the western distribution.

Addresses were delivered by the Secretary, Mr. Bodley, at every meeting, in which loyalty to Canadian industry was made the key note. An appeal was made for a better appreciation of the work being done by the Canadian manufacturer in the development of the country. The importance of our Imperial connection was emphasized, and it was urged that trade be kept within the Empire.

Exhibitions in Prairie Provinces

The Trade Sections Department are directing special attention to the opportunity afforded by the exhibitions in western cities for bringing Made-in-Canada goods to the attention of the people of the Prairie Provinces. The dates for this year's exhibitions are as follows:—

Calgary - - -	June 28th to July 3rd.
Edmonton - -	July 5th to July 10th.
Saskatoon - -	July 12th to July 17th,
Brandon - -	July 19th to July 24th.
Regina - - -	July 26th to July 31st.

These exhibitions comprise what are known in the West as "A Circuit," and might be described as the annual outings of the Western people. They are widely advertised and attended by hundreds of thousands of spectators, but as opportunities for showing goods that are made in Canada, they are sadly neglected.

On the contrary, however, reports which we have received indicate that American manufacturers are very quick to take advantage of these Fairs as means of developing their sales in the Prairie Provinces. At least fifty per cent. of the goods shown are said to be of American origin and in one instance last year foreign competitors occupied ninety per cent. of the space.

In view of the keen demand for the products of Canadian manufacture fostered throughout the country by public institutions, boards of trade, commercial and social organizations, coupled with the necessity for an equalization of trade as between Canada and the United States, it is incumbent upon Canadian manufacturers to place their goods prominently in the lime-light, and we therefore submit that the anomalous situation in connection with these important exhibitions where goods of American origin predominate should be corrected.

Made in Canada

A conference of the Toronto Branch Executive with representatives of the Ontario Association of Architects was held on March 11, when it was decided to intensify the "Made-in-Canada" campaign, which the Association has carried on for some years. The Association desires to co-operate with organizations of engineers and architects with a view to encourage them to specify Canadian material, whenever possible in Canadian contracts.

With the issue of the new *Trade Index*, it is now convenient to prepare lists of articles not "Made-in-Canada" to determine the making of selections, when contracts are let. A special committee has been appointed, consisting of four

representatives of the Ontario Association of Architects, together with an equal number of manufacturers to work out definite plans.

Renewed Scholarship

The Toronto Branch Executive have agreed to renew the scholarship of $50, which has been contributed by the Committee for the past six years to the Ontario College of Art.

Peterborough Branch Inaugurated

A special meeting of the manufacturers of Peterborough was held in the Princess Hotel, Peterborough, on Monday, March 29th, to formally inaugurate the Peterborough Branch of the C.M.A. Mr. W. R. Breyfogle, chairman of the branch, presided, and Messrs. J. E. Walsh, general manager, and H. Macdonald, secretary of the Ontario Division, were guests of the branch. The chairman reported that the City of Peterborough had been able, without difficulty, to reach 100 per cent. membership of the local manufacturers in the branch, and explained the advantages of membership in the national Association.

Mr. Walsh made a detailed statement, explaining the introduction of the divisional organization and of the services of the Head Office departments. The departments were officered by experts, such as individual manufacturers could not retain including Transportation, Tariff, Insurance, Legal, Trade Sections and Publicity. He stated that the present membership in Ontario was 2,139—in Toronto 929, and in Peterborough 35.

Mr. Macdonald explained the work of the branch as being two-fold. They had their domestic problems, covering such questions as Industrial progress, "Safety" and Technical education. The larger questions received consideration through the committees of the Division and finally, in the Executive Council. He invited the branch to consider its problems from a provincial standpoint rather than in their purely local aspect. The questions of workmen's compensation and of taxation had a special interest for Ontario manufacturers, and the Legal Department was well equipped to advise on all such questions, as well as on the various problems of commercial law that presented themselves.

The secretary of the branch is Mr. J. J. Turner, who has had the assistance of Mr. Leonard Fraser, secretary of the Board of Trade.

Freight Rates for Maritime Provinces

By G. P. Ruickbie

Transportation Department, C.M.A.

Acting on instructions from the General Manager I left Toronto on March 2nd, for a visit to the Maritime Provinces, in order to investigate complaints from members in that section of unfair freight rate adjustments to points in Ontario and the Northwest, caused principally by the percentage increases which have taken place during the war.

Mr. H. R. Thompson, Secretary of our Maritime Division, met me in Fredericton, N.B., on March 4th, and we subsequently visited St. John, Halifax, Sydney, North Sydney, New Glasgow, Amherst, Moncton and Bathurst. Prior to this Mr. Thompson had sent out notices to all our Maritime members, advising them of our itinerary, and inviting any who had transportation problems they wished to discuss, to make an appointment with us, or, if this were not practicable, to submit their views in writing to him at Amherst.

At each place we visited we met various manufacturers and other interests. Transportation matters in general were fully discussed, and the consensus of opinion was that the ever-widening spread between rates from the Maritime Provinces and rates from Montreal to points in Ontario and the Northwest, caused by increases being made on a straight percentage basis, was working a real hardship on Maritime industries, particularly those who must look to other provinces to market a portion of their output. Some lines of industries are more adversely affected than others, due to the nature of the articles they manufacture and the fact that their raw materials have to be transported from far distant localities,

It was considered advisable to get further detailed information as to how each line of industry is affected, and with this end in view a questionnaire is being sent to all members, which will give those who have not already done so, an opportunity of setting forth fully the difficulties under which they are operating.

Activities of the Quebec Division

By R. W. Gould

Secretary Quebec Division, C.M.A.

The Quebec Division held a "mission" in the City of Quebec last month. We secured thirty new converts, who are members of the Canadian Manufacturers' Association for the first time in their lives. A luncheon was held at the Chateau Frontenac on March 4th, at which there were present about 75 members and guests. Louis Letourneau, M.P.P., the chairman of the Quebec branch, acted as chairman. The Provincial Government was represented by Hon. L. A. Taschereau, the Attorney-General, and now acting Prime Minister, who addressed the Association at some length, dwelling in an optimistic vein upon the possibilities of Canada in general and the Province of Quebec in particular.

Other speakers were His Worship, Mayor Samson, of Quebec, who is an enthusiastic member of the Association; Colonel W. J. Sadler, chairman of the Montreal branch of the Association, and Hon Frank Carrell, M.L.C., of Quebec. Mayor Hayes, of St. John, N.B., one of our eastern members, happened to be in Quebec, and also made a short address, as did also J. E. Walsh, the general manager of the Association Your secretary had splendid support from the members of the Montreal branch in the effort, and some ten or fifteen went to Quebec to attend the meeting. Among them were J. H. Sherrard, A. H. Brittain, W. J. Sadler, P. E. Joubert, W. S. Fallis, J. E. Riley, and others.

Following the luncheon a meeting of the Quebec branch was held in the round cafe. There was present at this meeting George D. McKinnon, of Sherbrooke, and Robert Ryan, of Three Rivers. The question of a renewal of interest in the Quebec branch was discussed, and the business profits war tax came in for a considerable amount of discussion.

It was decided that so far as the provincial division was concerned that hereafter four meetings a year would be held in Montreal, four in the City of Quebec, one in Three Rivers, and one in Sherbrooke. The Sherbrooke meeting will be held, it is hoped, during the month of May, and the Three Rivers meeting in the month of September this year. A movement is now on foot to form a new branch in Three Rivers, which, during the past two years has become one of the most important manufacturing centres in eastern Canada. There is enthusiasm galore in Three Rivers.

Following the effort in Quebec on March 4th, your secretary called a meeting of the Quebec branch on March 16th. The meeting was held in the L'Union Commercial Building. It was decided at this meeting to hold a monthly meeting of the branch hereafter. This programme has been rather lax during the past two years, and the new decision is part of the programme to engender a new interest in the branch

in the City of Quebec. The meeting of the Quebec branch will be held on the 20th of April. The field is white unto harvest in Quebec, and the Association hopes to have a real progressive report to present at the annual meeting on the coast so far as the Quebec branch is concerned.

The meeting of the Executive Council of the General Association was held in the Windsor hotel on the 25th, and was well attended. Montreal has not had the honor of a meeting of the Dominion Council for some time owing to the smallpox epidemic, but happily this has subsided, and we are again able to mingle one with the other. J. A. Woodward, president of the Canadian Railway Brotherhood, addressed the divisional luncheon at this time, taking as his subject, "Service as the Social Law," and it was much enjoyed by those present. It was something of an innovation for a labor man to address the Manufacturers' Association in Montreal, and one which was enjoyed equally by labor and the manufacturers.

A large number of our members are intent upon attending the annual convention of the Association on the coast, and are making their plans for the trip. It is the intention of the division to carry on a more intensive programme of organization during the summer months in the Province of Quebec than has been the case hitherto.

Alberta—B.C. Industrial Congress

Outline of Arrangements

All arrangements have been completed for the Alberta-British Columbia Industrial Congress, and the tour of Western Canada by a large body of representative industrial and financial men from Canada, Great Britain and the United States, which takes place from June 2nd to 10th, and coincides with the itinerary of the Canadian Manufacturers Association on their way to their annual meeting in Vancouver. The Congress is this year being managed from the office of the Alberta Industrial Development Association in Calgary, and Brigadier-General F. H. McDonald, C.M.G., D.S.O., general manager of this organization, is handling the details of the big gathering. He recently returned to Calgary from Vancouver, where the details of the British Columbia end of the trip were arranged.

The Industrial Congress tour commences at Medicine Hat on June 2nd, and synchronizes with the itinerary of the C.M.A. specials in visiting Lethbridge, Calgary, Edmonton and then on to the Coast cities. At Edmonton the main sessions of the Congress will be held, and the delegates will have the opportunity of listening to addresses on Western Canada by practical men of great experience, who are thoroughly familiar with this part of Canada.

The Congress Executive look forward this year to having a particularly strong British representation, and are in touch with the National Manufacturers Association of Great Britain, with the idea of organizing a British party to attend the sessions in June. Those in charge of the Congress are confident that it will be a great success and surpass that of last year in every respect.

Canadian Industries Exhibition

Instructions re Shipments

Instructions as to the best method to ship material to the Canadian Industries Exhibition, London, are contained in a bulletin just issued by Mr. O. C. Pease, the Canadian representative of the exhibition. These apply to all exhibitors who have not already made private arrangements and who wish to take advantage of the system of bulk shipments. The material is to be handled by the shipping firm of Morison, Pollexfen & Blair of Canada, Limited, of whom Mr. Pease says:—

"The company of Morison, Pollexfen & Blair has been chosen by the Canadian Manufacturers Association and the Exhibition Management to take care of all shipments placed in their charge by intending exhibitors. The Morison Company is one of the best of the English forwarding houses, has been established in the United Kingdom for over 60 years, and is thoroughly well represented in Canada.

"In brief, the Morison Company will collect all material and assemble at the port of Montreal. The company will then re-mark all packages and crates, and arrange for the shipment of all material in one consignment. This one consignment will be shipped to the Morison Company at the Royal Agricultural Hall, Islington, London, Eng. The goods will arrive at the point of destination on or about the 24th of May. For the information of shippers who are handling their own consignments, I may say that the hall will be open to receive shipments on and after May 20th.

"Your company's representative in England will thus be able to proceed direct to the representative of Morison, Pollexfen & Blair at the hall, and on payment of all shipping charges and transportation costs, etc., will be able to obtain a release of your exhibition material and proceed at once upon the arrangement of your space contracted for.

"Exhibitors who intend to place their shipments in 'bulk' consignment must advise M. P. & B. just as quickly as possible, so that the latter may make full arrangements regarding ocean space. A knowledge of the weights, measurements, etc., of shipments is of course absolutely necessary.

"The Morison Company of Montreal and Toronto offers every facility they have to inexperienced shippers, and I suggest to the latter that they utilize the services of the forwarding agents to the fullest possible extent."

Mr. Pease's circular gives details as to crating and marking invoices, charges, etc.

Activities of the Prairie Division

By G. E. Carpenter
Secretary Prairie Division, C.M.A.

At the recent session of the Manitoba Legislature the Provincial Government appointed a joint committee consisting of ten members of the Legislature, five representatives of organized labor, and five representatives of the employers in the province, to deal with labor's requests for provincial legislation, the two chief items being a demand for 100 per cent. compensation and a compulsory collective bargaining law.

The Joint Committee acquiesced in the employers' request that actuarial experts be employed to advise upon labor's request for a state fund for workmen's compensation insurance. These experts have visited Winnipeg, and reported that state insurance is feasible in Manitoba. They have recommended that compensation to injured workmen be increased from 55 per cent. to 66 2-3 per cent. of wages; that the waiting period be reduced from six to three days; that pensions to widows and children be increased from $20 and $5 respectively to $30 and $7.50 respectively; and that funeral expenses be increased from $75 to $100. They reported that, with the elimination of agents' commissions Government taxes and other overheads, which they term "waste," which are paid under the present scheme of private insurance, the increased benefits referred to could be paid under a state plan without increasing premiums at present being paid by employers. They have made it plain in their report that these benefits go as far as labor can ever expect; that they represent the proper balance between the workers and employers, and should be accepted by labor as final. While labor repre-

sentatives on the Joint Committee were asking for 100 per cent. compensation, they have agreed to the report, and employers' representatives have acquiesced in its main points, which are outlined above. A bill was introduced embodying these provisions.

On the vexed question of collective bargaining, labor and employer representatives on the Joint Committee could not get together. Labor started out by requesting enactment of a law providing for the interpretation placed upon collective bargaining by the Strike Committee at the time of the Winnipeg general strike, which the representatives of the running trades on the railways and the Minister of Labor all held to be incorrect, so there was very little likelihood of the parties getting together. Numerous meetings were held in an endeavor to reach some common ground, but without avail. Labor's representatives ultimately withdrew from the meetings. The ten members of the Legislature were expected to make a report before the close of the session, but at the time of writing had not yet done so.

Electricians' License Act.

When the Electricians' License Bill was passed three years ago, providing that all electrical work in Manitoba should be performed by journeymen electricians holding a license under the Act, this branch arranged that exception be made to cover repairs to plant equipment and clause No. 14 was added to the bill, providing that this work could be done by the chief engineer of the plant. Every session since that time an amendment has been introduced seeking to cancel this clause. In the amendment of the Act this year cancellation of clause 14 was provided for. The branch secured the co-operation of the Manitoba Employers' Association, the Winnipeg Board of Trade, and the Engineer's Organization, and appeared before the Law Amendments Committee, with the result that clause 14 was allowed to remain in the Act, the statement being made by the Attorney-General that no reference should have been made to it in the amendment.

Temperance Act Amendment.

An amendment was introduced at this session providing for the purchase of alcohol for manufacturing purposes from or through a Government vendor in quantities not exceeding 10 gallons at one time, and restricting the size of the package in which the manufactured product containing alcohol could be marketed. A committee from the branch waited upon the Law Amendments Committee and pointed out that when a similar practice has been invoked in another province, manufacturers had to pay 50 per cent. more for their alcohol than it could be obtained from the distillers. Strong objection was, therefore, taken to purchasing from or through a Government vendor, although the committee expressed its willingness to assist the chief inspector, administering the Temperance Act, to keep a proper record and check of all alcohol used for manufacturing purposes. It was also shown that the quantity of 10 gallons was insufficient and impracticable; that the alcohol was usually purchased from distillers in bond; that the inspector of the inland revenue department would only release an original package at one time, and that the alcohol was actually mixed with other ingredients under the supervision of the inland revenue inspector. In fact in some cases the duty was paid on the product which was manufactured under his supervision. At the suggestion of the Attorney-General a conference was arranged with the chief inspector of the Temperance Act, and an amendment was redrafted to enable manufacturers to import any quantity of alcohol for manufacturing purposes in bond, and secure a permit from the chief inspector to store while being used in manufacturing. Restrictions as to the size of the bottles in which toilet articles and flavoring extracts could be put up, namely, 2½ ounces, were also cancelled.

Legislation, Saskatchewan.

The Saskatchewan Legislature, at its recent session, passed an Act to create a Bureau of Labor and Industries to gather information and publish statistics regarding employment, hours, labor difficulties, labor organizations, relations between capital and labor, conditions of employment, resources of Saskatchewan and industrial development. The Bureau will open and maintain employment agencies and administer the Factories Act, the Building Trades Act, the Electrical Workers Act, Employment Agents Act, the Mines Act, and the Minimum Wage Act of the Province.

An amendment was passed to the Factories Act limiting the hours of employment for youths, young girls, and women in factories to 48 hours per week, and authorizing the Lieut.-Governor in Council to make regulations for the construction and operation of elevators, hoists and dumb waiters. The amendment also provides that any person under 16 years of age shall not operate an elevator for the carriage of passengers.

Accident Prevention.

Mr. E. McGrath, Secretary of the Bureau of Labor, submitted by letter to a general meeting of Manitoba members particulars of a plan to facilitate accident prevention in plants by forming ambulance classes to whom Mr. Ward, superintendent of St. John's Ambulance Society, will give instructions. In addition to this the Bureau of Labor will furnish Safety First bulletins to employers, and request that these be kept posted in a conspicuous place in the factory, as it has been found that these have a great educative value with workmen. The meeting endorsed the proposed movement, and when Mr. McGrath takes the matter up with the members they are requested to give it their active and cordial support.

Steam Boiler Act, Manitoba.

The Steam Boiler Act of Manitoba provides that where fires are maintained in boilers overnight a third-class engineer must be employed where the capacity of the boiler is over 20 lbs. pressure. A committee from the branch, appointed at a general meeting of members, interviewed Mr. McNamara, chief inspector. He stated that the examination for the third-class engineer was very simple, and advised manufacturers to have their employees take the examination. He recommended a study of the first two chapters of Odell's Engineering Treatise, stating that it was very simple, and that anybody of average intelligence could readily pass the examination after reading these two chapters. He stated that where any firm had employed a night watchman for some time, and through illiteracy or lack of knowledge of the English language it might be impossible for him to pass a written examination, if the firm would write Mr. McNamara explaining these circumstances an oral examination would be arranged. The committee reported accordingly at a general meeting of members, and it was decided to adopt these suggestions.

Increased demand for fire protection has rendered larger factory accommodation necessary for the American La France Fire Engine Co. of Canada, Limited, Toronto, and an addition is under construction. This is 60 x 100 feet and will cost $35,000. Twenty additional hands will be needed.

The Situation at Ottawa Reviewed

Position of the Three Parties at the Close of the First Portion of the 1920 Session—Permanent Organization of the Unionist Party—Measures that have been Introduced to Date and Probable Action Thereon.

By Industrial Canada's Parliamentary Correspondent

OTTAWA,—Twenty-four sittings of Parliament were held before adjournment for Easter holidays, and they were sufficient to demonstrate that neither of the three parties seriously want an election. It is true that the Opposition leader, the Hon. Mackenzie King, declared, by resolution, that there should be an immediate appeal to the people, and the Liberal Opposition as well as the Agrarian third party voted for it. But the attitude of these groups since, makes the declaration appear like a party formality rather than a fighting declaration. There has been much business since the session opened, but no real hostility. It seems clear that, at the earliest, there will be no general election until 1922.

Members of the group of twelve, who constituted themselves the Agrarian third party, under the leadership of Hon. Mr. Crerar, fear that they have made a mistake in formally forming themselves into a Parliamentary group. They find that group action involves more responsibility and gives less liberty of action than individual independent membership. Most of the membership of the group are from the west and their decision to vote for an election has resulted in protests from Western constituents. The organized farmers of the West have intimated to their representatives that they made a serious mistake in voting for a general appeal to the people. It would not be surprising to see Parliament, in the near future, reduced to two formal parties with a sprinkling of independent individuals having the liberty to cast their votes with either side.

A Permanent Unionist Party

The organization of a Unionist party, with all the ramifications needed for a campaign, will be undertaken at the close of the session. It is recognized that something of this kind is essential before an election. The 1917 election was run by the Government largely with the old Conservative organization. Since that time this organization has been disappearing, so there has to be a survey of conditions in constituencies and the organization of willing workers into committees under the direction of experienced chairmen so that the vote may be brought out when the time comes. Sir Thomas White asked a Government caucus to begin the organization of a "National Liberal-Conservative party," but was met with a letter from Sir Robert Borden asking that there should be nothing done in this direction until his return, when he undertook to gather the Government supporters for a decision as to a permanent party and its policy. Reports from Sir Robert Borden indicate that his health has largely returned. He will be back in Parliament in the not distant future and it may be found that his health has so improved that he will be able to take his old place at the head of Canadian affairs.

There has been introduced the franchise measure needed for the holding of an election. It extends to alien-born Canadians more generous voting powers than had been expected by many supporters of the Government. The measure was supported by the Opposition leader and, when criticized by some of his supporters, the Government undertook to meet the new demands and still further extend its generosity to the alien-born citizens. It has been suggested that the Senate might exercise its authority and curtail the voting power of the alien-born, but this is not considered likely, as the franchise and all matters connected with voting are considered peculiarly within the province of the Commons.

A Disposition towards Economy

Main estimates for the year show a strong disposition toward economy on the part of the Government. Even by the exercise of economy and the elimination of money provisions for many works, such as the Hudson Bay Railway, the Government will have to find more than five hundred millions during the year. The revenue from all forms of taxation will not go much beyond three hundred millions. The most hopeful estimate, before the budget, is for three hundred and seventy-five millions. However, there is a handsome balance from the last loan, for which subscriptions totalled seven hundred millions, and this balance will cover the gap between revenue and expenditure. It will also make it unnecessary for the Government to ask the country for another loan this year.

Not only were the subscriptions to the last loan very generous, but payments of subscriptions have been exceptionally good. A greater proportion of this loan has been fully paid up than was the case with any of the previous loans during the same elapsed period. There have been fewer failures to make good on subscription undertakings. Out of the seven hundred millions subscribed, it is believed that there will be less than a million dollars which will not be finally paid in. The loan has proved a remarkable one in every respect.

The year's showing of the Canadian National Railways proved disappointing to Parliament. It is recognized that the systems taken over by the Government have not been co-ordinated to their full efficiency and the Grand Trunk has not been taken over. Still an adverse difference of forty-seven millions between what was taken in and what was paid out on railway account is regarded as a serious thing.

Fixed Charges on Railways

The fixed charges, or interest payments, on the Government railways totalled nineteen millions during the year. When the Grand Trunk is taken over and dividends paid on the guaranteed debenture stock of that company, and the charges on Grand Trunk Pacific securities are taken into account, the annual bill of fixed charges will amount to thirty-seven and a half millions a year. Therefore, the operating expenses and thirty-seven and a half millions more will have to be earned before Government railways begin to turn anything into the treasury.

The competition of the Canadian Pacific is one of the controlling influences in the railway situation. The fixed charges of the Canadian Pacific are only ten millions a year.

The Government is faced with the option of paying the railway deficit out of general taxation returns or raising the rates to a point which would provide for operating costs and fixed charges. If the rates on the Canadian National system were raised the Canadian Pacific rates would have

to be raised or the Government railways would not be able to compete for business. The suggestion that the rates of both lines should be raised and the surplus taken by special taxation from the Canadian Pacific does not meet with favor, for the Minister of Railways has stated that the Canadian Pacific would be able to put its extra earnings into betterments instead of into the Canadian treasury. This would mean that when the Canadian National system developed to a self-sustaining point, the Canadian Pacific would be developed to such a degree of physical perfection that it would be more than able to compete with the Government system. An increase in the transportation rates of the country would handicap business and be the subject of as great protest as would the paying of the railway deficit from the treasury. It is conceded that the management of the Canadian National Railway system is earnestly striving to make ends meet, and President D. B. Hanna has declared that given the Grand Trunk and reasonable time for co-ordination, he will be able to make the Government railways a paying proposition. This may be the worst year, and it is certain that Mr. Hanna and his associates will be given a further opportunity of making good their undertaking to turn the Government Railway system into a profitable thing for the country, without resorting to a general rate increase, except such as is given to Canadian and American competitors.

Progress of Merchant Marine

One link of the Canadian transportation system is paying its way and even better. This is the Canadian Merchant Marine, which consists of twenty-three ships, and which earned a profit of a million and a half dollars last year, although not all of the vessels had been launched and in service long enough to contribute to the earnings. The total fleet, when completed, which will be this year, will number sixty-three vessels and will be operated in conjunction with the Canadian National Railway system. As long as tonnage rates keep up this fleet should prove a profitable venture and will enable the Government railway management to maintain an efficient carrying system on both sea and land. Properly handled the rail and ocean services of the Government should prove a strong factor in developing Canada's foreign trade. Already Canadian Government vessels are on all the oceans and the Canadian flag on Canadian Government ships has been flown over cargo carriers in European, Asiatic, and South American waters.

The measure providing for Canadian representation at Washington has been introduced and will be one of the early bills to become law. The extent of Canada's representation at Washington is not indicated beyond a vote of sixty thousand dollars in the estimates. It is held that this should provide adequate representation, as the salary of the Canadian High Commissioner in London is only ten thousand dollars. There is no indication of who may be named for the Washington post, but the Government feel that there should be a strong man placed there.

Prospect for Labor Legislation

It is not expected that there will be labor legislation looking toward the eight-hour day or collective bargaining. It has been pointed out to organized labor that in this as in any other matters Canada cannot lead such powerful competitors as the United States. That country has not become a member of the League of Nations and has not enacted the legislation promised by the Peace Treaty. Canada has to compete with the United States as well as with the other strong nations of the world, and cannot enact laws in respect to labor or any other problem that will make competition impossible.

The naval programme of Canada will be modest for some years. Admiral Jellico made a report showing how Canada could participate in naval development if she desired to do so. The British Government offered ships. The situation was placed before a caucus of Government followers and the verdict of the caucus was that for the present there should be little or no expenditure on navy. But with ships on the seas carrying cargo it was felt that there could be no absolute abandonment of the navy. Therefore, the Government has decided to accept a cruiser and a couple of destroyers from Britain and to reorganize thoroughly the Canadian naval department. It is known that this has been badly needed. During the war first-class naval men were placed in Britain where they were most needed; and what was left were assigned to the outlying posts. Now that the war is over, it is held that the overseas naval organizations, such as that of Canada, are due for improvement. Canadians in the naval service of Britain are to be recalled to Canadian posts and men on this side, who have not shown high efficiency will be dispensed with. The work of reorganization has already begun.

There is no indication that the present session will be prolonged, controversial or anything but a good working meeting of the Canadian law-makers.

Important Customs Announcement

Drawback Regulations Are Amended

The general drawback regulations applying to articles manufactured or produced in Canada wholly or in part from imported duty paid materials are amended, to take effect from the 6th June, 1919, as follows:—

"When imported materials on which duties have been paid are used, wrought into or attached to any article manufactured or produced in Canada, there may be allowed on the exportation of such articles beyond the limits of Canada a drawback of ninety-nine per cent. of the duties paid on the materials used, wrought into or attached to the articles exported; provided that when both imported and domestic materials of the same class are used in the manufacture of the articles exported such drawback shall not be computed on a greater quantity of materials than entered into the exported goods; provided further, that such drawbacks shall not be paid unless the duty has been paid on the materials so used as aforesaid within three years of the date of the exportation of the Canadian article, nor unless the claims as presented at any one time aggregate ten dollars.

Claims for drawback submitted after the 31st day of December, 1920, shall not cover goods exported for more than one year and must be presented to the Customs with complete evidence attached within a period of six months from the date of the last export entry covered by the claim."

Exports to Newfoundland

Imported duty paid goods have been permitted to be exported to Newfoundland subject to drawback of 99% of the duties paid. The order-in-council authorizing this arrangement is dated 17th July, 1879, as amended by O. C. dated May 25th, 1883. These provisions have now been extended so as to include any British colony or possession in the Western hemisphere. Thus, imported duty paid goods may be exported in the same condition as imported to any British colony or possession in the Western hemisphere subject to drawback of 99% of the duties paid thereon. The claim for drawback must be made within six months of exportation of the goods; and the value of the articles claimed on at any one time must not be less than $100. Customs Form K. 13, is to be used in filing these drawback claims with the Customs.

Drawback for Home Consumption

When imported woven fabrics, on which customs duty has been paid, are used on and after the first day of January,

1920, in the manufacture of hatters' bands, there may be paid a drawback of ninety-nine per centum (99%) of the duty paid on the woven fabrics so used.

Canadian Section Revived

Franco-Canadian Trade

The Association has been informed that the Canadian Section of the British Chamber of Commerce, Paris, which was inactive during the war, has been revived, with the co-operation of Lieut.-Col. H. Barre, the Canadian Government Trade Commissioner, and that an effort is being made to secure support from Canadian manufacturers, merchants and traders.

The aims of the Canadian Section include such matters as (1) the obtaining of information on the commercial standing of French firms; (2) supplying of exact customs classifications of goods; (3) putting Canadian houses in touch with suitable agents; (4) notifying changes in French customs duties and proposed commercial legislation likely to affect special trades; (5) communicating enquiries from French buyers of Canadian goods; (6) filing members' catalogues for the information of buyers; (7) giving commercial and statistical information concerning Franco-Canadian trade; (8) aiding members in customs and technical difficulties; (9) providing means for the settlement of trade disputes by arbitration.

The subscription to the Canadian Section amounts to frs. 100 for non-resident members, and frs. 200 for resident members. The subscription includes a monthly bulletin, giving valuable information regarding new French legislation, change of regulations, decrees, etc.

Industrial Control

The Plant Executive or the Labor Leader—Which?

By A. B. WEEKS

General Manager, Canadian Northwest Steel Co., Limited, Vancouver

ESPECIALLY since the ending of the war by the signing of the armistice on November 11, 1918, the clamor by labor organizations for increased wages, shorter hours, better working conditions, collective bargaining, and their attempt at industrial control through recognition of the unions, and their attempt at industrial control through the closed shop, have been continuous and persistent.

Our industries, both great and small, through their executives, in the face of insistent economic reasons, or may we say international economic reasons for increased production and lower production costs, have granted one demand after another in the way of wage increase and curtailment of hours, at the behest of the labor organizations.

What is the Solution?

This clamor by organized labor is becoming ever louder, and their demands ever more insistent, until we have reached that stage in our industrial life where not only our continued prosperity but our very existence is threatened, at least temporarily, through our disregard of the laws of business economics, particularly as they relate to international trade.

For many years it has been a continuous contest on the part of the employer against outside forces, namely, the labor unions, for the control of the men engaged in industrial labor in our various industrial establishments. In the past few months the demand on the part of labor unions for a share in management through collective bargaining, through the labor unions, plant councils, etc., have become insistent, and the questions confronting business management at present, in the face of these ever-increasing demands, is, What is the solution?

Much has been said in the meetings of the various manufacturers' and employers' organizations, of the necessity for a campaign of public education. The writer grants that the necessity for such a campaign exists, but that a campaign of this character would of itself cure the present labor unrest is very doubtful. In the writer's opinion the time for an active campaign for the control of our labor by the plant executive has arrived. The campaign on the part of labor leaders for the control of labor is continuous and persistent, until the average workman is inclined to accept the teachings of the labor leader and classify the very occasional remarks of his employer as "some more hot air from the boss." Tactics must be met by tactics, and if the contest on the part of the labor leader for control is continuous, then on the part of the employer his endeavor for control must be continuous, collective and persistent.

In the writer's opinion much may be accomplished to gain the confidence and control of our men by closer co-operation with them; by a series of thoroughly organized and regular round table conferences, whereby the employer may gain a better understanding of the workman's viewpoint, his necessities and the conditions surrounding his life, and at the same time show the workman that the matter of wages and hours of work are not governed by the mere arbitrary ruling of the boss, but are on the other hand governed by the economic laws which control our national and international trade relations.

The average workman is an intelligent, fair-minded and patriotic citizen, and by instructing him in at least the fundamentals of the natural economic laws governing industry, his viewpoint toward wages, hours of labor and amount of production will be materially changed through his ability to analyze cause and effect, and in place of the present misunderstanding and unreasonable demands, we shall soon find that in our workmen we have a co-operative force working toward our mutual welfare and the public weal through the establishment of harmonious relations between employer and employee, without the intervention of any third party in the shape of labor unions.

Employers Should Get Together

Can the employers of this country not get together along these lines and effect a solution of our present vexing labor questions? This lack of co-operation and understanding between the employer and his employee, in the years past, has paved the way for the labor union, and is it not worth while, by endeavoring to establish confidence, co-operation and understanding between employer and employee, to arrive at those better relations which will make the labor union unnecessary and undesirable?

The answer to the question of "In whose hands shall industrial control rest—a plant executive or the labor leader?" lies in the hands of the employer himself. Which shall it be? Are you going to answer the question or allow the labor leader to answer it for you?

The 1920 Convention Province

An Account of the History, Resources, Scenic Attractions and Industrial Development of the Province of British Columbia in which the 1920 Convention of the C. M. A. will be held

As a useful preliminary to the Excursion to the Pacific Coast, in which a large number of manufacturers from the Eastern and Prairie Provinces will participate, there is presented in the following pages a section devoted specially to a description of British Columbia. The Coast province is one possessing a rich and varied interest, not alone for the searcher after natural beauty, sport and recreation, but for the man of affairs whose concern is with the making, transportation and sale of goods. The coming Excursion will afford a unique opportunity for an examination at close range of many of the more famous attractions of the Province as well as of that rapid growth in industrial activity which has characterized the past few years. To give excursionists a valuable basis of knowledge, which will enable them to appreciate more fully the position occupied by British Columbia in the Canadian Confederation, is the more immediate purpose of this compilation.

Starting with the history of the Province, which is rich in romantic interest, its extent and resources are taken up, and then attention is devoted to such prominent industries as Lumbering, Mining and Shipbuilding. Here will be found useful statistics and other information that will give a comprehensive idea of the development of each industry. Space is also given to the industrial activities of Vancouver, Victoria and New Westminster, and the special attractions of each place are enumerated. Altogether, when one has read through the various articles, a very good idea of the position of the province is obtained.

The 1920 Excursion to the Wonderland of the Pacific, undertaken as it will be in one of the most charming seasons of the year, is certain to prove a delightful experience for all who join it, while from the business standpoint it should result in the establishment of a stronger bond of sympathy and interest between East and West.

The Excursion party will leave Toronto on special trains on the evening of Saturday, May 29th, and after making brief stops at Winnipeg, Brandon, Regina, Moose Jaw, Medicine Hat, Lethbridge, Calgary and Edmonton, will reach Vancouver on the morning of June 7th. The interval from June 7th to June 11th, will be spent in Vancouver and Victoria. On the return journey stops will be made at Lake Louise and Banff and excursionists will have the choice of travelling by all rail or rail-and-water route from Winnipeg to Toronto.



An Inspiration in Stone

Diagonally across the Inner Harbor of Victoria from the Empress Hotel rises the stately pile of the Provincial Legislative Buildings, one of the most beautiful and ornate buildings in Canada. This will be one of the sights to attract the interest of visiting members.

British Columbia in the Making

By B. A. McKELVIE

ACCORDING to a local legend, two angels were sent to seek the most favored portion of the earth as the future home of a worthy nation, and to endow it with the richest gifts from Nature's store-house. They selected the northern half of this continent, and lavishly bestowed on it the wealth of minerals, forests and waters which they had brought. When the work had been done, the angels paused and surveyed it. One was satisfied, but the other exclaimed: "We have distributed our treasures with an indiscriminate hand, but have left no place for the husbandmen of a mighty race." So they returned to their labor and swept the riches westward, piling up treasure-bearing hills and creating fertile valleys in order to leave in the centre of the domain a rolling plain ready for the plough of the tiller.

Discovery of the Province

This, then, is perhaps the reason that British Columbia has such a wonderful proportion of Canada's natural resources; why its great wooded mountain ranges, bursting with gold, silver and baser metals extend from the prairies to the sea, forming thousands of land locked harbors and winding inlets teeming with fish, while its countless valleys are productive of the best to be found in the realm of agriculture.

It was fitting that the discovery of this Province should have been made by men who were seeking the Eldorado of tradition. That they found it is the belief of those who have the "open sesame" to the rock-ribbed chambers of wealth in this western land. The magic words of success are, they say, "faith and work."

Tradition says that Juan de Fuca was the first to visit this part of the Pacific Coast.The date of his journey is given as 1592, but reliable information respecting it is not available. His name was given by a later explorer to the straits separating Vancouver Island from what is now the State of Washington. No actual record is obtainable before the year 1775 when Bodega and Hecate visited the locality.

British Columbians really date the history of their province from the arrival of Captain James Cook in 1778 on his third voyage of discovery. He had been commissioned by the British Government to explore north of the 45th degree in the hope that a passage might be discovered from the Pacific to the Atlantic. In this, of course, he failed, but he gathered valuable data respecting the coast, and chartered and named such places as Nootka Sound, Prince William's Sound, and Cook's Inlet.

Chelikoff, a Russian, was the next explorer of note to arrive. He examined the country from the south-west extremity of Alaska to Prince William's Sound. This was in 1783, the same year that the North-West Fur Trading Company was formed in Montreal to carry on business in the western wilds.

Other seamen and traders followed, and in 1787 Captain Barkley records the discovery of the Straits of Juan de Fuca, which he named after the Spanish navigator of two centuries before. The following year Captain Meares started shipbuilding on this coast when he launched the "North-West Coast" at Nootka. In 1789 a dispute arose between the British and Spaniards over the trading rights to the country. The Spaniards seized the British post and ships. The "Nootka affair" was the result. For a time it looked as if war might eventuate, but the settlement of the difficulty, October 28, 1790, put an end to such fears.

Arrival of Capt. Vancouver

It was to settle the claims arising out of the "Nootka affair" that Capt. George Vancouver was sent out by the British Government as commissioner. Having accomplished his mission he continued on the coast exploring the uncharted waters, and to him belongs the credit for first circumnavigating the great island which now bears his name.

The years which followed are replete with tales of wild adventure and daring exploits on the part of the intrepid traders who ventured into the country in search of wealth.

The first journey overland from Eastern Canada was made by Sir Alexander McKenzie, who reached tide water near Bella Coola, in 1793. Fifteen years later Simon Fraser explored the river, named in his honor, reaching the Gulf of Georgia along its banks.

The boundary between Alaska and the British territory was fixed by a treaty between Great Britain and Russia in

1825. The same year Fort Vancouver, now in the State of Washington, was located.

The Hudson's Bay Company, the trading organization which had so much to do with the development of Canada since its incorporation in 1670, was given exclusive privileges in the western country in 1836. In 1842 this company selected Victoria as its headquarters on the coast, and the next year erected a fort and stockade.

Settlement was fairly rapid about Victoria, with the result that in 1849 Vancouver Island assumed the status of a crown colony. Fort Nanaimo was founded in 1852, following the discovery of coal at that place two years before. The old blockhouse is still standing in an excellent state of preservation, in the business section of the city. The stockade, however, disappeared many years ago with the growth of the town.

The first elections on Vancouver Island were held on August 4, 1856, and eight days later the first Legislative Assembly convened at Victoria.

Gold was discovered on the Fraser and creeks of the Cariboo district in 1856. Two years later there was a rush of gold seekers to the vicinity, and thus started the first real settlement of the country. A few of these pioneers who came in the first stampede are still alive to tell of those adventurous days.

It was in 1858 that the mainland of British Columbia became a Crown Colony, and its boundaries were defined. The capital of the new colony was located on the banks of the Fraser River. It was to have been called Queensborough, but Her Majesty, Queen Victoria, who was asked to name it, expresed her desire to have it known as New Westminster. The first session of the Legislative Assembly met at New Westminster January 21, 1864. Vancouver Island and the mainland united as British Columbia in 1866, the first Parliament meeting at Victoria in 1868. Two years later the province entered Confederation.

November 6, 1885, saw the connecting by steel of British Columbia and the Eastern Provinces, when Sir Donald Smith, later Lord Strathcona, drove the last spike on the line of the Canadian Pacific Railway. The terminus of the line was to have been Port Moody at the head of Burrard Inlet, but later it was moved fourteen miles nearer the mouth of the inlet to the small settlement of Vancouver. The City of Vancouver was incorporated in 1886, and was destroyed by fire the same year.

Such, in brief, has been the story of Canada's Pacific province. In the thirty-five years which have elapsed since the first locomotive brought through communication from the East, the development has in many ways been phenomenal, and as yet its natural resources are to a great extent unknown and practically untouched.

The discovery of gold in the Klondike in 1896-7 gave the trade of the province considerable impetus, and laid the foundations for many of the manufacturing plants of to-day. Full advantage was not taken at the time of the opportunities offered by the northern gold fields. The result was that the Port of Seattle gained a lead over Vancouver, which the Canadian city has not yet overcome.

The industrial development of British Columbia in the days before the war was greatly retarded by local conditions. Transportation problems, high wages, and production costs and lack of markets. Like every newly opened western region of great potentialities, the province suffered from the activities of the "wild-catter" and his fellows, the "boomster" and "land speculator."



A Giant of the Forest

Big timber on Vancouver Island, between Nanaimo and Alberni

From the trial and sobering influences of war, British Columbia has emerged keen, alert and sensible to the necessity for business on business lines. Land values have been reduced, and are more in keeping with their real worth. The "wild-catter," "boomster" and "speculator" have departed, and in their place are to be found men ready to discuss expansion and development along sane and reasonably safe commercial lines.

No longer is the province served by one railway. Three transcontinental lines traverse the mountain passes of the Rockies, opening up rich areas for settlement. Two of these are under the control of the Dominion Government, while the Provincial Government railroad is being completed this year diagonally across the province. The settlement of the coast district with its 27,000 miles of tidal shore line, is resulting in new and more frequent marne communication. The waterborne commerce of the world is increasing to and from Canada's Pacific ports, demanding the construction of great concrete piers, wharves, warehouses, dry-docks, etc.

The greater equalization of living conditions between the western province and the older portions of Canada with the consequent levelling of wages paid in dustry, the utilization of by-products, and the introduction of improved machinery and business methods have reduced the margin between production costs of the East and West. Thus British Columbia manufacturers have better opportunities in the competitive markets of the Dominion.

The Extent and Resources of the Province

GEOGRAPHICALLY, British Columbia comprises about 3,815,855 square miles. Its rugged coast line is deeply indented with thousands of bays and inlets, while islands, varying in size from bleak, barren rocks a few acres in extent to Vancouver Island, with its thousands of square miles of mountain peaks, forest and farming lands, parallel the shore line of the mainland.

Just what the population of the province is at the present time is something on which there is no authentic information. Some authorities compute the population at 400,000, while others declare that the province is the home of as many as 700,000 persons. In 1913 it was estimated that there were approximately 400,000 people. The early years of the war saw a great decrease, not only of urban, but of the agricultural population. The clarion call of battle drew men from the land, the forest, and the mine. The Empire's danger brought the sturdy manhood of the West forward in unexpected numbers. More than 35,000 were accepted for British Columbia's fighting battalions, while thousands went overseas as mechanics in non-combatant services, or as reserves for Britain's army or the gallant navy. The men who left the province for the battlefields of Europe numbered at least 50,000, although there is no way in which the exact total can be ascertained. Certain it was that many communities were denuded of their physically fit men, and before conscription.



A Mighty Catch of Fish

Scowload of salmon from the west coast of Vancouver Island being landed at Victoria

The initiation of shipbuilding and other war industries brought a rush of artisans to the manufacturing centres, particularly Vancouver, Victoria, and New Westminster. The close of the war and the return of the veterans from Europe has greatly increased the population. While not all those who left the province have returned—British Columbians having died gallantly on every field from Ypres to Mons—the total number of citizen-soldiers in the province to-day is far greater than the quota enlisted here. Every man who went away from this province, it has been said, was a publicity agent, and as a result of their stories of the wonders of "Old B.C.," thousands of their pals of the trenches and billets have come west to make their homes on the Pacific.

Greater Vancouver formerly boasted 150,000 residents. It now has, on a conservative estimate, at least 25,000 more than that number. In 1912, the banner year, 102,000 persons resided in the city proper. The assessment census for 1919 shows over 112,000. The same applies to the City of Victoria which now has a resident population of approximately 65,000.

The population of the agricultural districts has increased as rapidly as has that of the cities. This has been largely due to the Dominion and Provincial Government efforts to settle veterans on the land. It is safe to consider the population of British Columbia to-day at 500,000.

The actual resources of the province are fairly distributed. The coast district from the international boundary line to the Portland Canal, including the islands, is rich in mineral, coal, timber, and fishery wealth. The sheltered valleys, particularly that of the Fraser River and on Vancouver Island, are productive agricultural areas.

Farming and mining are extensively carried on in the interior districts, while lumbering is added to the returns from these sources in the mountain regions. The great central districts have countless fertile acres, capable of supporting a tremendous population. The rivers and creeks bear values from the hidden gold of the hills.

An illustration of what can be accomplished in the development of this western country may be cited from the returns in agriculture for the past year. Since the war greater attention has been paid to land settlement and agrarian pursuits than ever before. Although the areas on which veterans have settled under the direction of the Dominion and Provincial Governments have not yet been able to demonstrate their productivness, the richness of the soil has been amply proven.

The increase in the value of the crops for 1919, was more than $10,000,000 over the aggregate of the previous year. The acreage of grain was greater and the yield 50 per cent. above that of 1918.

The increase in dairying was marked. The returns were $676,452 greater than ever before. This was largely made up by the manufacture of 29,604 pounds of butter more than the 1918 total, and by the sale of 300,000 additional gallons of milk.

On an estimated value of $12,287,510 invested in live-stock, there was, according to the Provincial Government Department of Agriculture, an increase in horses, sheep, swine, and other farm animals amounting to $2,588,631. Of this amount $1,786,280 represents the increase in the value of cattle.

Poultry ranching is being largely engaged in. During the year a desirable increase in production from these small farms was reported. This included the sending to market of 834,484 dozen eggs and 1,096,801 pounds of poultry meat over the total disposed of in 1918.

British Columbia fruits have long been noted for their excellent quality, size and coloring, and this branch of farming is becoming more and more important each year. Orchards planted in pre-war days are now coming into full bearing. Each year the proportions of the crops will increase. The added value of the fruit shipments of 1919 over the corresponding twelve months was $2,498,766, representing 26,743,744 pounds.

Under its land settlement scheme the Provincial Government cruised 101,309 acres during the year, and actually acquired by purchase 18,763 acres. Of this land, 10,000 acres was allotted and sold to 68 settlers, and 8,500 acres were made ready for settlement. Work was started on 13,000 acres additional.

Province's Mineral Wealth

While the mineral production of British Columbia last year, as was anticipated, did not reach the total of 1918, it aggregated $33,,421,333. The decrease was almost entirely due to the falling off in the demand and price for copper which followed the end of the war. It is declared by experts that the prospects for the industry have never been more hopeful, nor the proposed development greater than at present. The ore reserves of British Columbia can never be estimated, but scientists have calculated the coal deposits at 83,828,523,000 tons. The mines of the province have produced to December 31, 1919, the vast total of $670,774,914.00.

The lumber industry is one from which the people of the Pacific Coast derive an immense revenue. With the greatest stand of saw log timber on the continent, and illimitable stocks of pulp wood, the future of the lumbering industry is filled with promise. It has been computed by one statistician that if the timber of the province was all cut that a board walk 2,000 feet wide could be built around the equator, and there would be enough left over to construct a stairway to the moon.

While fishing resources of the coast waters still yield a rich harvest, the intensive methods used in the past on the Fraser River have practically eliminated the runs of sockeye salmon. The returns, however, are still exceedingly profitable. The public, canners, and fishermen are now fully alive to the need for rehabilitating the rivers, and are giving careful study to the propagation of salmon. It is expected that in a few years, with proper handling, the Fraser River runs will again reach the proportions of other years. The deep sea fisheries are in a prosperous state, and there is every indication of their growing importance.

Not alone by the growth and development of her vast natural resources does British Columbia expect to become a wealthy and progressive province. It is expected that the trade development of Canada will be carried on largely through the Pacific ports of the Dominion. This idea is strengthened by the belief that the Canadian Government will, through its ocean services, bring great quantities to the Port of Vancouver for shipment over its railway, and will export largely from British Columbia.

Across the broad Pacific are countries and peoples anxious and ready to do business with Canada. They require our manufactured articles, and in return are ready to send us such essentials as we need in our industries. Such trade means much to the future prosperity of the nation. British Columbia realizes the importance of it, and is preparing to fit its harbors and ports to handle the great fleets of commerce-carriers which will undoubtedly come as economic conditions rectify themselves after the turmoil of war.

B.C.'s Shipping Facilities

Dry docks are being constructed at Vancouver and Victoria. There is already a giant dry dock at Prince Rupert, now being used for steel ship construction. Government docks are being started at Vancouver to cost $4,000,000, while other harbor improvements under contemplation will cost another $1,000,000. The Dominion Government is already possessed of one concrete dock at Vancouver, which cost $2,000,000, and a grain elevator which holds 2,500,000 bushels. The C.P.R. will shortly start on the expenditure of several million dollars for additional docking facilities demanded by the increased trade of its services.

While British Columbia can do much to bring prosperity through trade to the Dominion, the whole of Canada must cooperate, and particularly the manufacturers of the nation. The markets are waiting and the people of the west are ready to do their share in keeping wide open the sunset gateways to the future prosperity of the great Dominion. Let everyone help to bring that prosperity as speedily as possible.



An Attractive Corner of Beautiful Victoria

On the left rises the imposing front of the Empress Hotel, in which the annual banquet of the C.M.A. takes place on June 10; on the right stands the many-domed pile of the British Columbia Parliament Buildings

Lumbering in British Columbia

LUMBERING is British Columbia's most accessible natural resource, and the one most easily exploited. It is not surprising, therefore, that the contributions from this source to the public revenues and the prosperity of the province are larger than those from any other industry.

It has been said that "the forest reserves of British Columbia are inexhaustible." This, of course, is true only to the extent that measures are undertaken for conservation and reforestization. At the present time the natural growth of the forests is approximately three times the yearly cut, but the destruction by fire reduces this to a narrow and dangerous margin. So extensive, however, are the woodlands of the coast and interior hills and valleys that with the natural increment entirely off-set by conflagrations, it will take two hundred years to denude the province of its merchantable timber at the present rate of production.

The cut for last year was 1,758,329,995 feet (board measure). The stand of saw log timber is variously estimated from 350 billion feet to 400 billion feet. The immensity of this can be judged from the fact that the Dominion forestry experts give the total standing timber in Canada as being between 600 billion and 800 billion feet. This gives British Columbia credit for one half of the forest reserves of Canada. The pulpwood stand in British Columbia is calculated as being 250 million cords. The line of demarkation between pulpwood and saw timber is variable. Ordinarily saw-log timber is said to be trees having a diameter of more than 10 inches, those of smaller thickness being used for pulpwood purposes. But as trees of this thickness and under are often used in saw mills and those of larger dimensions for pulp, the exact reserves of pulp wood cannot be exactly stated. The figure given, however, is considered to be a conservative one.

Some idea of the menace of fire can be gleaned from the estimate of Government engineers that twice the amount of the present stand in the province has been destroyed by fire in the past. Or that the fire fiend has wiped out the equal of the total available supply in Canada to-day.



A Transportable Lumber Camp
Buildings in which lumberjacks are housed and fed may be moved from place to place



Interior of Dining Room
A view showing how well the men are provided for in the way of food and service

While the cut of saw logs was not as great during 1919 as in the previous year, the value of the timber products showed an increase of more than $16,000,000. The decrease in the cut was due to the cessation of the War Board's spruce production camps—for airplane timber—on Queen Charlotte Islands. Here during 1918 some 28 million feet were cut—more than the total of all other districts on the North American Continent.

The development in the lumber and pulp industries during the past year are indicated in the comparative tables:—

	1918	1919
Lumber	$26,219,697	$31,000,000
Pulp and Paper	10,517,250	12,554,257
Shingles	5,805,417	12,801,564
Boxes	1,845,195	2,142,000
Piles and Poles	394,871	769,962
Miscellaneous (cut by railroads, mines, etc.)	1,773,821	5,256,520
Ties	*	2,091,346
Additional value contributed by the wood-using industry	1,689,810	1,720,000
Product of Dominion lands	4,953,829	*
Laths	120,278	195,594
Logs exported	148,808	991,365
Total	$54,162,523	$70,285,094

* Included in other items.

Water-borne shipments from British Columbia ports in 1919 show an increase of about 17,000,000 feet over those for 1918. The total was 105,111,090 feet, the shipments in 1918 being 88,069,029 feet. Roughly, 60 per cent. of the water-borne shipments were to Great Britain, no less than 65,264,720 feet being sent there in the twelve months ending December 31. Exports to other countries were: Australia, 6,891,728; South America, 1,551,574; China, 16,218,533; Japan, 4,537,959; Africa, 5,044,852; United States, 4,139,074; Manila, 987,562; Straits Settlement, 475,088.

A typical logging scene on the Pacific coast, showing the goodly sizes of some of the logs taken from the forests of the province



Pulp and paper industry figures for the year were most gratifying, both in point of value and production. In 1918 the newsprint manufactured was 112,206 tons. This increased the following year to 123,607 tons. The production of sulphite pulp increased from 66,054 tons to 80,047 tons. Sulphate pulp reduced from 12,188 tons to 9,473 tons, being reflected in the decrease in the weight of Kraft papers, of which 7,202 tons were manufactured in 1919 as against 8,277 tons in 1918. The manufacture of ground wood pulp increased from 91,145 tons to 99,769 tons. The value of the outfut of the pulp and paper industry increased by $2,000,000.00.

Where Heaviest Timber Stands

The heaviest stands of timber and most extensive forest areas are located in what is known as the coast district. This is West of Cascade Range, and is again sub-divided into districts termed: Southern Mainland, East Coast of Vancouver Island, West Coast of Vancouver Island, Northern Mainland, and Queen Charlotte Islands. Logging in the past has mostly been carried on in the Southern Mainland and East Coast of Vancouver Island districts, where the majority of the lumber mills are located. Incidentally there are about 390 mills in operation in the province, about 150 of which are in the interior districts, and the balance on the coast. Most of these are located in the vicinity of Vancouver, New Westminster, Victoria, and Nanaimo.

In these districts it is estimated that there is still standing 120 billion feet of timber, made up as follows: Douglas fir, 50 billion; Western cedar, 35 billion; hemlock, 20 billion; balsam, 10 billion; spruce, two billion, and the remainder of less commercial varieties. On the West Coast of Vancouver Island there is judged to be, 55 million feet of the varieties named. This added to the reserve on the East Coast and Southern Mainland gives 175 billion feet, or 50 per cent. of the estimate for the province.

The Forests of the North

The Northern Mainland district, extending from Queen Charlotte Sound to Portland Canal is a rocky and mountainous country, timber being confined for the most part to the shore line and valleys. This district contains, however, 23 billion feet of saw timber and considerable stocks of pulp wood.

The stand of 15 billion feet of timber on Queen Charlotte Islands is mostly Sitka spruce and hemlock.

While the forests of the interior do not cruise as heavy to the acre, the total merchantable lumber is high in the aggregate. Owing to the difficulties of transportation the development inland has not been as rapid as on the coast. The estimate of timber is given at 136 billion feet, divided as follows: Spruce, 58 billion; cedar, 18 billion; balsam, 14 billion; Douglas fir, 12 billion; hemlock, 12 billion; lodge pole pine, 12 billion; bull pine, four billion; larch or tamarac, three billion; Western white pine, two billion feet.

The Douglas fir, the most valuable tree on the Pacific Coast, is highly prized for its strength and durability. It grows to tremendous heights, specimens 300 feet high being not uncommon, while its base circumference is often from 30 to 50 feet. It grows as far north as the 52 degrees, from where red cedar, hemlock, and spruce predominate in the forests. Douglas fir is not confined to the coast, being found as far inland as the slopes of the Rocky Mountains.

Some Famous Kinds of Wood

The red cedar is next in importance. From it the shingles which are exported in such profitable quantities are milled. These are gaining in popularity in the markets of the world.

The varieties of spruce which grow in such quantities throughout the province are fast gaining in value, furnishing the supply for the pulp mills, while the coast, or Sitka, spruce is especially suitable for airplane construction on account of its strength, lightness and elasticity.

For a long time hemlock was not used to any great extent, but this excellent wood is gaining in popularity as its admirable qualities are recognized. White pine, tamarac, balsam, yew, maple and cottonwood are also cut for commercial purposes.

There are twenty-three coniferous trees and a like number of broad leaf trees indigenous to the Province. The capital invested in the lumber industry of British Columbia

(*Continued on page* 152.)



Ships in the Process of Building
View of one of the six shipbuilding plants in operation in the Vancouver district

The Coast Shipbuilding Industry

BRITISH Columbia shipbuilders—even in the hectic days of war production—never attempted to sacrifice efficiency in construction and reliability of workmanship for records of speed in launching. They preferred to build ships that would serve the Empire's needs in the long years of peace rather than hulls which would serve only for the emergencies of war.

In localities to the south where the advertising value of rapidity in building was highly regarded, useless, unseaworthy boats swing idly at anchor—representing millions of dollars of wasted public funds, while long, tedious enquiries and nasty scandals now occupy the attention of Government officials. Foreign buyers, anxious for bottoms to replace those scuttled by Hun submarines, have had to refuse acceptance because the vessels delivered to their order were unable to make the trip across the Atlantic.

Boats Built Seaworthy

It is not with any sense of jubilation at the loss to the commerce fleets of the world that British Columbians view these circumstances. But a sense of pride is permissable in the fact that the boats launched from the Canadian ways are now carrying cargoes to and fro across the oceans of the two hemispheres. This pride is especially worthy when it can be openly stated that acceptance was not refused of a single ship put into the water from a Western Canadian yard.

When, in the days before the war, suggestions were made that British Columbia should be the home of extensive shipbuilding plants, the idea was ridiculed. "Where would the shipwrights come from?" was one of the questions asked by scoffers. "Did British Columbia hope to build boats as seaworthy as those from the Clyde?" was another oft-repeated interrogation, while the concluding argument was the statement that local constructors would have to import all the machinery and auxiliary plants for the finished ships.

Such were the objections raised by those who doubted the energy, resource and determination of western business men. The answer has been given by the dozens of wooden craft and great steel freighters that are to-day scattered over the face of the globe. The declaration of the Department of Marine that the ships constructed on Government order at Vancouver were the equal of any afloat, has proven the workmanship, while the busy mechanics in the metal shops of Vancouver and Victoria have given denial to the libel on their capabilities by turning out first-class boilers, engines and auxiliary equipment.

It may be of passing interest that the cabled reports for one week recently showed that British Columbia-built boats were at such remote ports as: Sevastopol, Newport News, Liverpool, London, Yokohama, Rotterdam, Boston, Barry, Trieste, Barcelona Martinique, Constantinople, Cardiff, Immingham, Malta, Venice, Buenos Aires, Gothenburg, and Sydney.

Active shipbuilding commenced in British Columbia when the Provincial Government offered a guarantee of interest on the earnings of wooden ships constructed and operated from the province, as an encouragement to the industry. Advantage was taken of the offer by Mr. H. W. Brown and associates. Work was started on a fleet of twelve auxiliary five-masted, bald-headed schooners for the lumber trade by the Wallace Shipyards, Ltd., of Vancouver, and the Cameron-Genoa Shipbuilding Company, of Victoria. These boats were equipped with 320 h.p., Bolinder Diesel engines.

The "Mabel Brown," 2,500 tons, was the first boat launched, taking the water from the Wallace ways on January 27, 1917. In the following five months this yard launched these schooners at the rate of one a month.

Before the first wooden schooner was well on the stocks, Mr. A. Wallace, head of the shipbuilding company, determined to extend his operations to include steel ship construction. J. Coughlan and Sons, steel fabricators, had also embarked on an ambitious scheme for building steel boats, locating a four-ways yard on False Creek. The first boat was an 8,800 ton ship, originally on private order, but requisitioned by the Admiralty for the period of the war. This was the "Alaska," the largest vessel of its kind attempted to that time in Canada. Its launching on January 19, 1918 was a complete success. But the honor of putting the first steel ocean-going cargo steamer into the water from a Canadian shipyard went to the Wallace Company. It was the "War Dog," 4,800 tons d.w., which went down the ways, May 20, 1917.

The Tonnage of 1918

During 1918 forty-two vessels were launched in British Columbia, having a total tonnage of 155,600 tons d.w. Of these, Vancouver contributed eight steel and twelve wooden steamers, and six wooden schooners. Victoria built nine wooden steamers; New Westminster four wooden steamers; and Coquitlam three wooden steamers.

During that year there were in addition to the steel shipyards already mentioned, the following yards engaged in building wooden craft; Cameron-Genoa Shipbuilders, Ltd., and the Foundation Co., of B.C. Ltd., at Victoria; Pacific Construction Co., Ltd., Port Coquitlam; New Westminster Construction Co., Ltd., New Westminster; Western Canada Ship-

yards, Ltd., William Lyall Shipbuilding Co., Ltd., which took over the Wallace Shipyards' wooden construction ways, at Vancouver.

Two new yards started work on steel boats during 1918. These were the Harbor Marine Co., Ltd., of Victoria, and the Prince Rupert Drydock and Engineering Co., Ltd., Prince Rupert, both of which undertook Government contracts.

The year saw the closing of the wooden shipyards of the province. This class of vessel had been constructed to meet the emergencies of war, and with the coming of peace boats of a more durable type were required.

During the year the output of British Columbia yards totalled ten steel and forty-six wooden vessels, with an aggregate tonnage of approximately 170,500 d.w. Four of the larger craft were delivered on the order of the Imperial Munitions Board, while six were for the Canadian Government Merchant Marine. The wooden craft were for French, Norwegian, and Greek interests. Forty of them were wooden steamships for French buyers, two Greek, one Canadian, and three Norwegian vessels were launched during the year.

The programme was as follows:—

J. Coughlan and Sons, Vancouver, six steel ships, with a total of 51,400 tons.

Wallace Shipyards, Vancouver, four steel ships of 18,800 tons.

Foundation Co., Victoria, twenty French steamers, 60,000 tons.

Cholberg Ship Co., Victoria, three Norwegian sailing vessels, 4,500 tons.

Lyall Shipyards, Vancouver, eight French ships, 12,000 tons.

Western Canada Shipyards, Vancouver, five French ships, 7,500 tons.

New Westminster Construction Co., five French ships, 7,500 tons.

Pacific Construction Co., Port Coquitlam, two French and two Greek boats, 8,600 tons.

B.C. Marine Railway, Vancouver, steamer, Canadian, 500 tons.

The end of the year found approximately 65,600 tons of shipping on contract for 1920. The Coughlan Company had two 8,100-ton steel ships to complete for the Canadian Government Merchant Marine. One of these has since been launched. The Wallace Yard recently launched an 800-ton steel boat for the Union Steamship Co., and will build two 8,100-ton steel vessels for the Government.

The Harbor Marine Co. (Victoria Machinery Depot) of Victoria, is working on an order from the Government for two 8,100-ton boats, while similar work is engaging the Prince Rupert Drydock and Engineering Company at Prince Rupert.

Efforts are being made to induce the Government to place further orders for ship construction on the Pacific Coast, it being contended that, with some such encouragement for a short period, the industry will become permanently established, and orders can be secured in competition with foreign builders.

The Federal Government has made an offer to finance wooden shipbuilding at Victoria to seventy per cent. of the cost. There is no intention on the part of the Government to build boats of this class for its own services, but in order to assist the industry will advance, as a loan, up to seventy per cent. of the money required by private interests to build wooden boats. This, it is expected, will result in a revival of the industry to a certain extent.

It is particularly gratifying to the people of British Columbia that the boats now building in this province for the Canadian Government Merchant Marine will be put in service from British Columbia ports. It is also pleasing to know that the suggestion that steamship lines be established from Vancouver to Australasia came first from the British Columbia Division of the Canadian Manufacturers' Association.

The service was inaugurated on January 24 this year, when the "Canadian Importer" left British Columbia for the Antipodes with a Canadian cargo. Before long it is expected that the Canadian Government Merchant Marine will also ply be-



Wharves at Anyox, B. C.

Showing the facilities for handling ore and coal and shipping metal from the big smelters in the background

tween Vancouver and South American points, and perhaps to South Africa.

The shipbuilding industry has meant much to the coast province. Just how much can be judged from the fact that during 1919 the Coughlan yards alone employed on an average 2,500 men, and the earnings in wages amounted to approximately $2,100 each. In addition hundreds of persons were employed in metal trades shops and other smaller concerns dependent largely on the shipyards.

British Columbia steel shipbuilders have labored under difficulties. The supply of steel for their plants was largely imported from Eastern United States, and in this they suffered, not only from uncertain deliveries, but arbitrary freight rates, One of the greatest complaints voiced by British Columbia manufacturers is in connection with the six-cent arbitrary freight charge above the terminal rates to Seattle and Puget Sound points on rail shipments originating in Eastern United States. This charge on the steel required for a standard vessel amounts to between $8,000 and $10,000. An earnest effort is now being made to have this charge eliminated.

With steel water-borne from Nova Scotia it is expected that greater progress can be made at reduced costs. Eventually, if there is promise of permanency for the industry, British Columbia will have its own steel plants, manufacturing materials from native iron ores, it is predicted.

The Mining Industry of British Columbia

EXAGGERATION is unnecessary and words of fulsome praise idle, in describing the mineral wealth and potentialities of British Columbia. The accomplishments of companies operating on lines of scientific engineering and following common sense methods of business, bear sufficient testimony to the possibilities of the mineralized hills and valleys of the Province, while the romance of the industry has been such as to fire the mind of the most unimaginative.

Mining first attracted an influx of settlers to British Columbia. To-day it is regarded as the industry upon which the future will be most solidly established. Every portion of the Province is mineralized, and practically every metal known to North American geology is found within its borders.

Development work in the metalliferous mines has chiefly been confined to the recovery of gold, silver, lead, copper, zinc and iron, but considerable effort is now being put forth in the exploitation of the known resources of molybdenite. platinum, manganese and chromite.

Lack of transportation has retarded the growth of the mining industry, especially in those metals requiring heavy machinery for production, or necessitating the shipment of ores long distances for treatment. The great producing camps of the Province are situated either contiguous to the coast or close to railway lines. The great central and northern interior country with its veins of gold, silver, copper and lead bearing ores, must wait for the opening of roads before full development can be attained. These will only be built as required and a capital comes forward to develop the latent resources of British Columbia.

It has been often stated by public men, conversant with the extent to which British Columbia's industries have been developed: " The mining resources of the Province have not yet been scratched." The truth of this may be realized when it is stated that the great northeastern corner of the Province, comprising thousands of square miles has not yet been sufficiently explored as to admit of the publication of maps of it.

Nor have the mineral deposits of the coast districts been more than approached. This is indicated by Mr. G. A. Clothier, resident government engineer, for District Number One, comprising the coast, north of Vancouver Island, who says in his report to Hon. William Sloan, Minister of Mines:

" I would like to again call the attention of the prospector to the immense field open to him along the coast on the islands and from the head of Portland Canal north, along the eastern contact of the coast granite with the interior sedimentaries, to the Stikine river, and north of that on the same belt, through the Atlin country. The coast and islands, as can readily be seen on the map, are easily accessible at any point. The eastern contact belt, from the head of Portland Canal north, gives promise of becoming a great mineral producing area, judging from those portions of it which have been developed to any extent—the Salmon and Bear River sections, the Anyox section and the Alice Arm section. The southern portion of this belt is reached from Stewart, either by way of the Salmon River valley, over the Salmon River glacier, or the Long Lake glacier, or by way of the Bear River valley over the Bear River divide on the Bear-Naas trail, which extends through to Meziadin Lake. The northern portion is accessible by way of Stikine River, on which the Barrington Transportation Company runs a weekly boat from Wrangel to Telegraph Creek, commencing about May 15.



A Typical B. C. Mining Town

This is Anyox, 100 miles north of Prince Rupert, where the Granby Consolidated Mining and Smelting Co., operate an immense smelter

"In all probability prospectors' trails will be put into that belt this coming year by the Government from the Stikine and Iskut Rivers, south following the south branch of the Iskut, north from some point on the Bear-Naas trail, over the Bear River divide, and over the Salmon River and Long Lake glaciers, thus assuring definite and serviceable routes to facilitate the prospector in his work of extending the known mineral producing area."

By the foregoing it will be seen that not only does the Government believe that there is ample opportunity for the prospector, but that every assistance is to be given in developing a section of the Province in which the production and advancement of the industry last year proved so attractive. There is already every indication of a rush to this locality during the present summer.

The mineral production in this district during 1919 was very satisfactory. The value of the aggregate production of the Province as a whole was below that of the previous year, but far ahead of the total of any pre-war period.



A Power House in the Mining Country

Water is led down in a pipe-line from a dam high up in the hills and turns the water wheels in the power house

The out-put of the mines in 1919, was valued at $33,421,333. This was $8,361,141 less than the amount for the preceding twelve months. The falling off was almost entirely due to the demoralization of the copper market, following the close of the war. With accumulated war stocks on hand, production necessarily slackened, while the price fell away. During the last months of the European struggle copper was quoted at 26 cents a pound at New York. With the demand for copper halted, the price naturally declined, reflecting on the aggregate income from mining in this Province. The decrease in the value of the products of metalliferous mines, amounting to $7,815,221 was almost entirely due to copper conditions and quotations. The production of gold showed a decrease of $506,947, but again this was due to slackened demand for the baser metal, as practically all of the copper ores of British Columbia carry appreciable gold values.

The output of silver during the year showed an increase, not only in value, due to high prices, but in tonnage as well. New properties were opened, and old workings revived.

While the collieries showed an increase in 1919 on the coast, several of those of the interior were closed for considerable periods with labor troubles, caused, it is stated, by aliens employed there. The net result was that a decrease of $357,718 was shown in the total value of coal produced for 1919.

The production during 1919 may be given as follows: Gold, placer, 14,325 oz., $286,500; gold, lode, 141,769 oz., $2,930,365. Total gold, $3,216,865.

Silver, 3,667,516 oz., $3,871,631; lead, 32,134,136 lbs., $1,658,121; copper, 45,984,046 lbs., $8,631,205; zinc, 43,694,583 lbs., $2,717,803. Total, metalliferous, $20,095,057.00.

Coal, 2,357,218 long tons, $11,786,090; coke, 98,598 long tons, $690,186. Total of collieries, $12,476,276.00.

In addition to the above, miscellaneous metals and building materials had an aggregate value of $850,000.

The feature of coast mining during the year was the activity in the Portland Canal and Alice Arm districts. The Premier Mine, near Stewart, at the head of Portland Canal, made rapid progress and blocked out sufficient high grade ore to maintain operations for a great many years. The outlook for this mine was so promising that New York capitalists bought a controlling interest in it at a price said to run into the seven figures. Like most of British Columbia's successful mines, its history is one of hard luck for the original operators and success for those who had faith enough to continue development under discouraging circumstances. When Mr. R. K. Neill, the managing director of the company took hold of it several years ago, he found that the mine had been run parallel to the main ore body and that drifting had ceased within a few feet of high grade rock. Under his management ore valued at $10,000,000 was blocked out, and it was on this showing that the New York syndicate took an interest in the mine.

The Dolly Varden Mine, at Alice Arm, is another romance of western mining. The Taylor Engineering Company, of Vancouver, contracted to build a railroad from tidewater to the camp, 18 miles inland. The company then in control, sold out to an eastern concern, but in the transfer no provision was made by either party to liquidate the debt against the property to the engineering company. This was not paid. The matter was taken before the Legislature and after a lengthy investigation, an act was passed authorizing the Taylor interests to take charge of the mine in the event that the company operating the mine refused to meet the liability, amounting to $462,000. The company defaulted payment, and the Dolly Varden was taken over by the Taylor Engineering Company. Since that time it has developed into a "wonder mine." The Government report cites: "Five months from the time work started, 6,373 tons of ore had been shipped that will yield approximately 400,336 ounces of silver; about 40 tons of this was 'bonanza' ore."

While practically every other copper mine in British Columbia reduced its tonnage during 1919, that of the Britannia mine, near Vancouver, and incidently the largest copper mine in the British Empire, actually increased its output. The concentration mills at Britannian Beach, 28 miles from Vancouver, on Howe Sound, received from the mine 750,000 tons of ore, which yielded approximately 20,000,000 pounds of copper, 110,000 ounces of silver and 3,200 ounces of gold. Several months during the year the production reached more

(*Continued on page* 152.)



The Impressive Skyline of Vancouver, our 1920 Convention City

Vancouver's Industrial Achievements

By J. REGINALD DAVISON
Industrial Commissioner

VANCOUVER, "The Lion Guarded City," is strategically located at the portal of a province immensely rich in natural resources. Through its splendid harbor, as well as by its numerous railway arteries, it is in a position to receive from and ships to all parts of the world those raw materials and manufactured goods which are the source and product of industrial effort.

British Columbia is first of all a producing province. Its 395,000 square miles of area contain natural wealth of such immense extent that translated into a commercial story of dollars and cents, the sum total is well-nigh beyond comprehension. Lumber, minerals, water power, pure drinking water, wild medicinal herbs, agricultural lands, are a few of the land riches, and, in the fresh and salt waters are fish.

Three Canadian transcontinental railways and every trunk railway in the United States are connected with Vancouver, as well as the Pacific highway motor road from the Mexican border and the network of North American paved roads that will be joined into one grand evergreen highway. Eight trans-oceanic shipping lines and a fleet of coastwise vessels bring and carry goods from and to Vancouver's docks in ever increasing volume.

Vancouver never has a closed harbor. Three hundred and sixty-five days in the year—and sometimes 366—ships come in and go out, and, not only is shipping uninterrupted the year round, but the generally mild climate gives much economic advantage industrially. Without heavy snow or deep frosts, buildings are of less expensive structure; work is not delayed, health is not impaired, and materials are not destroyed.

Some Outstanding Figures

Vancouver bank clearings for the year 1919 were $655,913,205; more than ten million and a half greater than they were during the biggest boom year that Vancouver ever experienced. Vancouver has no boom now, yet there is a steady growth in population, land settlement, wages, and all industries. There is an almost weekly discovery of something new that can be made from local resources, that at once develops into a new industry. The population of Greater Vancouver is now 195,000, and the city is 34 years old.

During the years 1918-19 an industrial island has been built within the heart of the city; a working Venice, it might be described, in the centre of a shipping Liverpool. An arm of the sea, spanned by five wide viaducts, cut through the wholesale and retail district of Vancouver, dividing it nearly in half. At the times of high tide this arm, known locally as False Creek, was a mighty river. When the tide was out it was an unsightly stretch of mud flats. Many big industries are built on the waters of Burrard inlet and the Fraser river, but it was divined by minds looking towards the best interests of the city and of the manufacturers, that False Creek would, if reclaimed, add greatly to the city's appearance, to the city funds, and to manufacturers' interests. The matter was taken up by representative men with the proper authority, and permission given to "go ahead with the project."

Development of Granville Island

In less than two years Granville Island, as the reclaimed land is called, is a hive of industry reached by roadways from the different sides of the city, and having one wide canal as a front street for all factories. It is a 28-acre industrial site, with 39 factories working at full strength, while negotiations are pending for the remaining sites.

These factories built upon Granville Island are nearly all new to Vancouver, the list comprising the Etna Saw Works, Ltd., saw manufacturers; British Columbia Equipment Company, Ltd., machinery; Canadian Waterwheel Company, water power machinery; Atlas Steel Products, Ltd., metal working plant and storage; Crane Company, Ltd., valves, steam fittings, plumbing goods; A. Carruthers, Ltd., hides and furs; Dominion Construction Co., Ltd., builders, engineers and contractors; Electrical Manufacturing Company, Ltd.; Harrison and Lamond, Ltd., builders and contractors; Albert Kerr Co., Ltd., hide and skins; Lang Electric Company; Morrison Steel and Wire Co., wire nail factory; National Machinery Company; Pacific Roofing Company, Ltd., patent roofing; Pacific White Lead Company, Ltd., pigments; Paul and Watkins, coal; Pacific Construction Company, Ltd., engineers, contractors; Pacific Sheet Metal Works; Palmer Brothers, machinery; Shaake Company, Ltd., machinery; F. R. Stewart, produce merchants; Vancouver Pickle Company; Vulcan Iron Works, Ltd.; Wallace Foundry, Ltd.; Watson Bros., Ltd., fish curers and packers; Walsh Construction Company, Ltd:, construction engineers; Britannia Wire Rope Company, Ltd..

The building industry in Vancouver, notwithstanding the high price of lumber and other materials, keeps steadily on. During the first 17 days of this year $167,355 worth of work was contracted for. Building permits during 1919 amounted to $3,563,332 (Vancouver centre and Point Grey), a jump of $1,692,701 above the year before. Some of the buildings contracted for for immediate erection are the Martin-Senour Co., Ltd., remodelling, $10,000; Canadian Carbonate, of Montreal,



Vancouver's New Industrial Section

View of some of the industries on Granville Industrial Island, in the heart of Vancouver

new factory, $70,000; Mainland Cold Storage and Ice Company, cold storage plant, $15,000; Nash Motor Company, garage, $30,000; Britannia Wire Rope Company, $40,000 (initial expense); Harrison and Lamond, $15,000; Robson Street Theatre $300,000 (seating capacity 5,000, revolving stage showing six separate wings. Two other large theatres are in the course of construction. Bank of Hamilton, alterations; Royal Bank of Canada, new building; the David Spencer Departmental Store, addition and alterations, $100,000; Clark and Stewart, printers and stationers, new building. The Shaw Baby Carriage, of Vancouver, have erected a factory at Burnaby, a suburb. The C.P.R. will extend their car repair shops at Vancouver to attend to the general overhauling and renovation of passenger equipment formerly done in the Winnipeg and Montreal shops.

Vancouver harbor stands first in Canada for shipping. Through it passes practically all Canada's trade with the Orient. Eventually it is expected that the export of a large part of the prairie grain will flow through this port, and the Dominion Government has already built tremendous elevators for storage purposes at the Government docks.

Three hundred and twenty-one ocean going vessels entered Vancouver harbor during 1919, handling $84,000,000 worth of imports and exports. The 1919 tonnage for Vancouver harbor exceeded 10,000,000 tons, of which two-thirds was coastwise. On an average each ship that come to Vancouver as a port of call during 1919 spent $6,000 while in port, for stores and longshore wages. The ocean going ships of the class of the dollar boats and the smaller C.P.O.S. liners that make Vancouver a home port, leave $40,000 in Vancouver every trip. The big Empress boats average about $90,000 a trip, and, besides this, there is the revenue from the coastwise ships. (These figures do not include the seamen's wages.)

Another Canadian Pacific Railway pier is commenced immediately in Vancouver, to be known as Pier "B.C.," length 1,100 feet, width 340 feet. A second Government pier, to be completed before the end of 1921, will be built into Burrard Inlet, length 1,070 feet and 1,200 feet, and width 340 feet, the difference in length being caused by the contour of the shore line.

Wooden ships were built in Vancouver yards during 1919 comprising, in all, 100,300 tons. Forty of the ships were for France; three for Norway; two for Greece; and one a B.C. marine steamer. More ships are under way.

Catching and packing salmon and other fish (herring being a recently begun industry) in and about Vancouver and further north is one of Vancouver's special industries, and the three-year-old whaling business is now conducted on a big scale.

No less in importance to the toll of the sea is the toll of the land. Growers of small fruits in the Fraser Valley, adjoining Vancouver, have organized and systematized their work into a very big asset among Vancouver industries.



Another Glimpse of the Industrial Island

Its rapid development will be appreciated when it is pointed out that in 1917 the district was nothing but a series of mud flats



A Charming Prospect in Victoria

View taken from the grounds of the Parliament Buildings and embracing from right to left, the Empress Hotel, Belmont House and Victoria Post Office

The Charm of Victoria and Vancouver Island

By "ISLANDER"

SITUATED on an excellent harbor at the southern extremity of Vancouver Island, Victoria, the capital of British Columbia, is, indeed, a "City Beautiful," as it is often described by delighted visitors. Fanned by Pacific winds, warmed by the beneficent Japanese current, which is responsible for the mildness of the temperature of the Coast, the climate is the most delightful to be found in Canada; the scenery of the surrounding country superb, and the business opportunities and advantages many.

The local history of Victoria is as picturesque as its natural location. It was established more than half a century ago, when a boundary dispute threatened to end in difficulties between Great Britain and the United States. The Hudson's Bay Company, which had been located in the disputed territory, later ceded to the United States, to make sure of the permanency of its Western headquarters, moved to Victoria, attracted by the strategical position and natural harbor. Great Britain, at the same time, established in the adjacent harbor of Esquimalt her first Pacific naval station.

The political growth of British Columbia centred about Victoria, and it was fitting that the city should have been chosen as the capital when the two Crown colonies which sprang into existence with the settlement of the country united.

Facing the business centre of the city are located the magnificent Parliament Buildings. Patterned after the princely palace of a Nabob of India, the great grey stone pile is a structure of rare architectural beauty.

Not only are the scenery, cosy villas and well-ordered gardens suggestive of the Old Country, but an English atmosphere pervades the whole city. The gnarled oaks, clumps of willows, and gorse covered cliffs complete the picture and give justification to the oft-repeated description, "A Little Bit of Old England on the Shores of the Pacific."

Its geographical location makes the city a point of commercial and industrial importance. The business centre of Vancouver Island, Victoria, enjoys a large volume of trade from the numerous smaller communities to the north, and from the development of the natural resources of the great island which parallels the mainland coast for a distance of 285 miles. Its breadth averages sixty miles. On the map of the trade countries of the Pacific, Victoria assumes a real importance, for it is the first port of call for the big cargo and passenger steamers from the Orient, Australia and New Zealand.

For a long time the argument was advanced that its insular position would prevent the city from ever becoming the location or distributing point for manufacturing plants. The fallacy of this contention has already been proven, while there is every prospect for a great development in different lines of industry. Vancouver Island is possessed of a wonderful store of natural resources. Its shores are covered with heavy stands of timber, its hills have already yielded rich returns in minerals, while great coal fields have for decades supplied domestic and export trade. The fisheries of both coasts are extremely profitable and the agricultural areas are among the best in the Province. With such a hinterland, Victoria is justified in being optimistic.

Railway car ferries operate from Vancouver across the Gulf of Georgia delivering freights at terminal rates, thus overcoming what might have proved to be a serious barrier to the progress and business development of the city.

Already there are many important factories located in and about the city. Included in the list are, two cement works at Tod Inlet, where 5,000 barrels of cement are manufactured daily; three brick works, two chemical works, five box factories, one stove, range and furnace factory, eight sheet metal works, three paint factories, one rubber roofing plant, one clam cannery, one macaroni factory, three rice mills, three coffee and spice mills.

In addition there are ship-building plants, dockyards, saw mills and other large industries.

During the war Victoria became a centre of shipbuilding activities, both steel and wooden vessels being constructed. Work is now proceeding on steel freighters for the Dominion Government.

Victoria's Fine Harbor

Extensive plans are now under way for the expansion of the harbor facilities. A breakwater and Government docks were completed a few months ago, greatly adding to the port accommodation, and it is proposed to construct, near the city, a huge dry dock. A valuable site, known as the Songhee Indian reserve, was purchased from the aborigines a few years ago, and this will be developed into railway terminals for the C.N.R. and C. P. R. lines, both of which have systems on the island. Already there are three marine ways in operation about Victoria.

The city with its suburbs comprises 8,692 acres. It has a population estimated at nearly 70,000. There are 132 miles of concrete sidewalks, and 65½ miles of boulevards, 77½ miles of unpaved streets; 135 miles of water mains, 30.43 miles of street railway tracks.

The drive from Victoria North to Nanaimo and then across the island to Port Alberni, is one of the most beautiful in British Columbia. It is an attraction that annually draws many hundreds of tourists from Seattle and other United States centres. Passing over the Gorge, the approach to the city's natural park—and through the picturesque suburbs of Victoria, the highway winds across Langford Plains and upwards, twisting and turning, over Malahat Mountain. At places the roadway has been blasted in the hill which falls away into the blue waters of Saanich Inlet many hundreds of feet below. A wonderful view of the scenic beauties of this reach of the sea are obtained before the Summit has been passed and the descent is commenced.

Through a wooded country where settlers are fast establishing comfortable homes and profitable homes, the road descends to Shawnigan Lake, a spot much favored by sportsmen and summer campers. Continuing, it leads through rich agricultural lands to the Town of Duncan.

This little community has even a more distinctive English atmosphere than has Victoria. The farm owners who settled this desirable locality many years ago, were mostly from good English homes, and they have preserved in the community the suggestion of the land of their nativity. Duncan is the centre of a fertile and productive valley, and enjoys a good measure of trade. One of the best examples of a co-operative creamery can be seen at Duncan, its products being of such a quality that the operators cannot supply the demand for them.

From this thriving little centre, the Island Highway traverses the Westholme district dotted with well developed farms, past Mt. Sicker, where some years ago copper-gold properties were extensively worked, and where there is every evidence of a revival in mining.

The first glimpse of salt water since leaving Saanich Inlet is obtained when Chemainus is reached. This is the little town which largely depends for its existence on the big mill operated by the Victoria Lumber Manufacturing Co. This mill was at one time rated as being the largest of its kind in the world. It is capable of tremendous production, and great cargo ships may be seen at the company's wharves loading British Columbia timber for the four quarters of the globe. Considerable trade is done in Chemainus with the farmers who work the land in the vicinity of the town.

Seven miles distant from Chemainus is Ladysmith, situated on one of the best harbors in British Columbia. This city, of 4,000 inhabitants, may be said to be on the fringe of the Vancouver Island coal areas. It is the shipping point for the Canadian Collieries (Dunsmuir) Company, Limited, which operates mines twelve miles away at Extension, and also for the Granby Mining Company's collieries at Cassidy's.

Ladysmith, a Summer Resort

The harbor view from Ladysmith is entrancing, and it is fast becoming popular as a summer resort, the crescent-shaped beach, carpeted with powdered sea shells and screened by small wooded islands opposite to the town, affording an excellent camping ground and vacation centre.

In addition to being the shipping point of the coal mines in the district and the home of the miners who travel to and from Extension by train, the town boasts a large smelter and

(*Continued on page* 156.)



On Vancouver Island's Famous Highway

This is a scene on the Malahat Drive near Victoria, which forms part of a fine motor road extending from Victoria to Nanaimo



View of Part of the Industrial Section of New Westminster

The Industrial Importance of New Westminster

By R. A. MCLELLAN

INDUSTRIALLY the City of New Westminster, on the banks of the historic Fraser River, has always been firmly founded on the sound economic principle of exploiting the natural resources of the country, not by the export of these resources in their raw state, but by their manufacture into the finished article. In earlier days, it canned the world-famous sockeye salmon, and it still cans to the limit of a depleted supply. It is, of course, the market centre for the greatest farming district of the lower mainland, the Fraser Valley, but the purpose of this article is not to deal with that phase of the city's activities, except in so far as they have created industries. Now the industrial life of New Westminster is based on another great natural source of wealth, the timber of British Columbia forests; and the principal industry is the manufacture of lumber and of lumber products. The lumber industry of the lower mainland is destined more and more to concentrate on the Fraser River, for reasons that will be dealt with later. As long as there is timber to cut on tidewater, and men shelter in houses built of lumber, so long will lumbering be one of the great basic industries of this community. But there is also good ground for the hope that side by side with lumbering there will grow up here the great iron industry, which must eventually come from British Columbia's ore wealth.

The people of New Westminster have never been prone to advertise. For this reason, although the name of Vancouver is known all over this Dominion, relatively few people know that its smaller neighbor is already a sound, well-established industrial community, and offers for certain forms of manufacturing the greatest advantages to be found anywhere in British Columbia. But of that, more anon.

With a population of perhaps 18,000 New Westminster and its environs in 1919 exported a really respectable quantity of lumber and lumber products. Four plants alone cut 154,000,000 feet of lumber, which was despatched to all parts of the world. The same four plants in that year paid out approximately a million and a half dollars in wages. This sum, however, represents more than the work done in the sawmills, for some of these plants produce also shingles, boxes, and other manufactured articles. The production of shingles probably ran into the billions.

The biggest lumber plant in the world is conceded to be that of the Canadian Western Lumber Company, which is located in a self-contained community, Fraser Mills, adjoining New Westminster on the east. Within the city limits are the plants of the Brunette Sawmills, the Small-Bucklin Lumber Company, and the Westminster Mill Company. All

(*Continued on page* 154.)



New Westminster from the Fraser River Bridge

Labor's Requests and Government's Answer

The Various Subjects Dealt With by the Trades and Labor Congress of Canada in Its Interview With the Government and the Reply of the Acting Prime Minister to the Representations of the Interviewers

FOR the information of the membership, and also as matter of record, there is published on this and the following pages the summary of representations submitted to the Government by the Executive Council of the Trades and Labor Congress of Canada, on the occasion of their annual interview with the members of the Cabinet. This took place on January 8 last. It is followed by the reply of the acting Prime Minister, which appears in the form of a letter to the Secretary of the Congress, dated March 4.

Labor's Representations

To the Premier
and Members of the Dominion Cabinet:

Honorable Sirs:

During the years of the war the Dominion Government enacted very little labor or social legislation. The declarations in the labor sections of the Peace Treaty; the report of the Industrial Relations Commission, which investigated conditions throughout the Dominion last May and June; the recommendations of the National Conference of Employers, Employees, etc., held in Ottawa in September last, and the findings of the International Labor Conference recently held in Washington, all emphasize the need for immediate action in this direction.

The Trades and Labor Congress of Canada, at its 35th annual convention, held in Hamilton, September 22nd-27th, 1919, and at which about nine hundred and fifty delegates were in attendance, reached many important decisions reflecting the opinions of the workers throughout the entire Dominion as to the imperative necessity for enacting new legislation and amending existing legislation.

Extended summaries have been prepared relative to some of the outstanding legislation affecting labor. Other requests are submitted in condensed form, mention being made of the number of the resolution and the page in the proceedings of the Trades and Labor Congress Convention (copy of which is enclosed) on which the full text can be found.

Now that peace has been finally established, we look forward confidently to the requests being granted, which we herewith respectfully submit on behalf of the Trades and Labor Congress of Canada.

TOM MOORE, *President.*
ARTHUR MARTEL, *Vice-President.*
H. J. HALFORD, *Vice-President.*
A. MCANDREW, *Vice-President.*
P. M. DRAPER, *Secretary-Treasurer.*

INCREASE AND USES OF MILITARY FORCES

Now that the war, which was to end all wars, has been won, we regret to note that steps were taken last year to increase the permanent military forces of Canada from five thousand to ten thousand men. Coincident with this action, the jurisdiction of the Royal North-West Mounted Police was extended to other older settled provinces of Canada and its personnel largely augmented.

Reports reached the Executive of the Trades and Labor Congress of the bringing of military forces into districts where labor disputes were existing.

These actions are strongly protested, and the tendency towards building up Canada during peace times as a military power is considered as detrimental to the development of this country along democratic lines, and liable to lead to unnecessary infringement and curtailing of the rightful liberties of its citizens.

We ask, therefore, that steps be taken to relieve the country of as much of this burden as can properly be done and the non-military policy of pre-war times re-established as soon as possible.

ORDERS IN COUNCIL AND AMENDMENTS TO CRIMINAL CODE

We express our satisfaction that the repeated requests of the organized workers have been heeded and the restrictions upon freedom of speech and press have been removed to a large extent by the repeal of all Orders in Council dealing with these matters. It is with regret, however, we again have to draw to your attention that the amendments, passed during the last regular session of Parliament to the Criminal Code incorporated many of the provisions of the Orders in Council above referred to and make possible prosecutions and infliction of heavy penalties for possessing certain literature and attending meetings and committing other innocent acts, which would not be dangerous to the general peace of the country.

With the country now on a piece basis, we ask that immediate consideration be given to our request for the repeal of the amendments to the Criminal Code, here referred to, believing that the law, as it previously existed, is sufficient to maintain law and order.

IMMIGRATION

The whole question of immigration is one in which organized labor has continually taken a keen interest. Many requests for measures of protection against indiscriminate admittance of emigrants to this country have from time to time been presented. Amongst these recommendations are:

(*a*) The appointment of a representative of the organized workers, along with others, on a Central Empire Board. (See page 45, Congress Proceedings, 1919.)

(*b*) The necessity of revision of the present method of admittance of Orientals, by either total exclusion or international arrangement, limiting the number to one per thousand of the population.

(*c*) The elimination of any system whatever of bonusing for the introduction of industrial workers.

The adoption of a literacy test is highly approved, as is also the formation of a National Council to control the immigration of women emigrants for domestic service, etc., and the representation provided thereon for returned soldiers and organized labor. Our co-operation to make this a success is sincerely promised.

Strong protests have been lodged during the past year against the amendments to the Immigration Act incorporated in Bill 03, and some in Bill 52, especially the amendments which make possible the deportation of British-born subjects after having fulfilled the provisions of the Act giving them domicile as Canadian citizens. The repeal of these sections are strongly urged.

Request is made that the proper authorities be asked to intercede with the United States immigration authorities in order that Canadian theatrical mechanics entering the United States be given the same consideration as American theatrical mechanics coming into Canada. (Resolution 15, page 138, Congress Proceedings, 1919.)

RIGHT TO ORGANIZE

The right of workers of all grades to free association for their own protection has been made the subject of important declarations during the past year. The Treaty of Peace (Paris), Article 2, says:—"Employers and workers should be allowed the right of association for all lawful purposes." The Industrial Relations (Mathers) Commission makes a similar recommendation. This was again endorsed at the National Industrial Conference by both employers and employees. (Page 221.)

It is regrettable to note, therefore, that the Dominion Government have passed legislation making illegal the right to organize by many of their own employees (Dominion Police, many of whom are merely watchmen), and that other public bodies have enforced regulations abridging this right to organize of their employees, and private employees are from time to time emulating their example and endeavoring to prevent organization by discharging and otherwise discriminating against employees who do not organize.

We urgently call your attention to the need for legislation which would make such acts against workers illegal and

action which will restore to all workers the absolute right of organization. (See page 188, Congress Proceedings re police.)

COLLECTIVE BARGAINING

The acceptance of this principle should be given all possible encouragement in order to lessen the time lost by industrial disputes. We would draw your attention to the findings of the Mathers Industrial Relations Commission on this subject and also the representations made by the workers at the National Industrial Conference based upon these findings and ask that, in harmony with recommendations commonly accepted at the National Industrial Conference, that the Government institute in its own departments, wherever practicable, this principle and undertake the initiative in establishing councils in industries, recognizing trade unions as the basis of representation. These measures, we feel sure, will assist materially in bringing about the more general adoption of the principle of collective bargaining.

EIGHT HOUR DAY AND FORTY FOUR WEEK

We request legislation providing for a maximum work day of eight hours and a maximum work week of forty-four hours, and the establishing of a minimum wage adequate to insure a fair standard of living. In presenting this we wish to briefly review as follows:

The efforts to establish this shorter work day and week and an adequate wage have been the most fruitful cause of strikes.

The justice of the claim for a maximum eight-hour day is recognized in the Treaty of Peace, to which Canada is a signatory.

The Washington Conference (League of Nations, Labor Section,) almost unanimously adopted a draft convention declaring for the universal acceptance of the principle of eight-hour maximum day as a minimum condition in all except a few Oriental countries.

Canada is more fortunately placed than many other countries as regards raw material, etc., for her industries and therefore is able to adopt more than the scant minimum provided in the general convention, and we therefore ask for the half day holiday on one day of the six, making a forty-four-hour week.

Most of the Central European countries, including those most devastated by war, have already established laws providing variously for the forty-eight-hour week, the maximum eight-hour day and in some cases the forty-five-hour week is the legal maximum. The countries referred to include France, Belgium, Italy, Germany, Czecho-Slovakia, the Netherlands, Sweden, etc., whilst others, including Great Britain, are committed to legislation which is now pending.

Reports issued to the National Conference, Ottawa, by the Minister of Labor, showed nearly fifty per cent. of Canadian workers in industry already enjoy the eight-hour day or less and a great proportion five and a half day week or less.

The short work day is most generally established in Canada where conditions are most unfavorable, that is in the building industry, which has a limited season. In the Western Provinces, where industrial development is smaller and has to meet heavy costs of transportation, etc.

Employers and workers are agreed on the necessity of uniform legislation on this matter throughout the Dominion.

The cost of living is now only barely met in better paid trades by present wages, and for that reason we ask consideration of provision for protection against reduction in aggregate wages by the introduction of the eight-hour day, which would leave them below the proper standard of existence.

TECHNICAL EDUCATION

On this subject the report of the Congress is:

"It is noted with pleasure that the Dominion Government have decided to appropriate certain sums of money for the purpose of providing technical education, and desire to add the suggestion that both the Dominion and Provincial Governments should spend more money on this work."—(See page 159, Congress Proceedings, 1919.)

CO-OPERATIVE LEGISLATION

The prevailing high cost of foodstuffs and other necessities of living demand radical changes in the method of distribution throughout this country. As a means to this end, the co-operative movement has proven, in other countries, to be of inestimable value; we therefore request that all possible assistance and encouragement be given by your Government to the formation and operation of co-operative societies throughout the Dominion and that legislation making easy the incorporation of such societies be enacted. (See Resolution 3, page 218, Congress Proceedings, 1919.)

REGISTRATION OF UNION LABELS

This subject has been frequently submitted in subsequent years and we again reiterate our request for legislation granting to trade unions the right of protecting their union labels and emblems from infringement. Reference to this is made in President's report, page 127, Congress Proceedings, 1919.

INDUSTRIAL DISPUTES ACT

During the past years, the Trades and Labor Congress have requested the repeal of this Act. The compulsory clauses in this Act have been shown time and again to be generally impossible of enforcement, and the Government, whilst refusing to repeal them, have nevertheless refrained from enforcing them. This attitude brings about a disrespect for the law and is undesirable. The other sections of the Act, owing largely to the growing industrial importance of widely scattered sections of Canada, are becoming more difficult to administer promptly and effectively. Some provinces are also instituting machinery for the settlement of industrial disputes, and, in view of all these circumstances, we suggested that the time has arrived for an entire revision of the machinery of investigation and arbitration. The Congress stands ready to participate in a conference to undertake this work in order that legislation may be devised to provide for quick and satisfactory settlement of disputes.

Decisions rendered that the Act does not apply to public-owned utilities, whilst being compulsory on private-owned utilities of identically the same nature, causes discontent and confusion amongst the workers concerned, and we, therefore, request that pending change and acquiescence with the request made above, that the Act be made applicable to all workers named in the Act, whether employed by a private company or a public authority or a Government department.

HEALTH REGULATIONS FOR PAINTERS

Last year a resolution was presented asking for compulsory labelling of receptacles containing white lead, etc: This is again reiterated.

A further resolution presented to you last year dealt with the denaturing of alcohol, thus rendering it less injurious to men who inhale the fumes. This is reiterated in resolution 82, page 84, Congress Proceedings, 1919.

PROPORTIONAL REPRESENTATION AND OTHER AMENDMENTS TO ELECTION ACT

This subject has been presented by representatives of organized labor on subsequent occasions. The adoption of this measure is reported by the Mathers Commission on Industrial Relations, paragraph 68. It was later made the subject of debate at the National Industrial Conference (Ottawa, September 15th to 20th, 1919,) and received the unanimous approval of the employers, employees and the public groups. Much information as to this measure is furnished on pages 168 to 178, National Industrial Conference Report, 1919. The definite request of labor is that this measure may be made applicable to all future elections, in the belief that it will assist in establishing confidence in constituted authority.

We further reiterate our previous request that election days should be declared public holidays; or, alternately, the hours of voting should be extended until 8 p.m. in the evening. (See Resolution 5, page 220, Congress Proceedings, 1919.)

CANADA COPYRIGHT ACT

Amendments are sought to the Canada Copyright Act which will give a greater measure of protection to Canadian authors and composers, and, at the same time, encourage the printing of copyright books in Canada. This request is covered by Resolution 13, page 120, Congress Proceedings, 1919.

HOUSING

Attention has been directed to the assistance given to housing by the Dominion Government and Provincial Legislatures. A special report on this subject is found on pages

(*Continued on page* 144.)

Lightning Rods for Factory Protection

A Consideration of the Laws of Science on Which the Practice of Rodding Depends—The Old and the New System of Rodding Buildings Explained—Insurance Rates Reduced Where Buildings Have This Protection.

By PROFESSOR W. H. DAY



A Well-Rodded Factory Building

A MILLION five hundred thousand dollars in round figures was paid out by insurance companies in Canada in 1918 to cover losses to buildings caused by lightning. In the light of this appalling loss, can the subject of lightning rods be regarded as an unimportant one?

Surely it is of great importance and not only so to the agriculturalist, whose barns are so frequently a favorite target for the lightning bolt, but for the manufacturer as well. Factories and mills are often damaged by lightning, the high chimneys and somkestacks being particularly susceptible to stroke. The writer saw one chimney that was fractured from top to bottom in this way and sometimes they are so shattered as to be practically useless thereafter.

Professor Day, who was formerly on the staff of the Ontario Agricultural College, Guelph, is recognized as one of the foremost authorities on lightning rods in Canada. When connected with the College he made an exhaustive study of the subject and proved that the efficiency of the protection on rodded buildings was over 90 per cent. He is now secretary and manager of the Shinn Mfg. Co. of Canada, Limited, lightning prevention experts, Guelph. The following article has been written by him at the special request of the Insurance Committee of the Canadian Manufacturers Association for the information of members.

While engaged as Professor of Physics at the Ontario Agricultural College during the past fifteen years, it was my duty and privilege to make an extended study of lightning rods, first, as to their efficiency, and secondly, as to how the laws of science can best be applied so as to reduce the hazard from lightning to a minimum.

It is almost 170 years since Franklin invented the lightning rod. Yet it is only within the last five years that we have known from compiled data its actual efficiency when properly installed. And the efficiency was first worked out at the Agricultural College for the Province of Ontario. I need not detail how this was done—that is all told in Bulletin 220, issued in 1914, by the Ontario Department of Agriculture, and which is distributed free on request. Suffice it to say that we found the efficiency to be over 90 per cent. in most cases, and sometimes nearly 100 per cent. Since then other investigators, following similar lines, have obtained like results, notably, Professor J. Warren Smith, of Colombus, Ohio, whose investigation included fifteen States of the American Union. The results over the entire field covered by his investigation, showed an average efficiency of 90 per cent. In other words, lightning rods as installed saved $90.00 out of every $100.00 it was possible for them to save!

Why do not rods save the full $100.00? In a word the answer is that many of them are not scientifically installed. in fifteen years' study of this subject I have yet to learn of the first case of a scientifically rodded building being burned. In every case investigated it as been found that the simplest, yet most fundamental laws of the science of electricity have been grossly violated. Let me illustrate. Most ground rods in the past have been run straight down the gable end from the peak to the ground. Let us study this case. When the roof becomes wet it is a conductor because water is a conductor. The lightning does not always strike the highest point. Near Enterprise, about 20 miles north of Napanee, on a certain farm I visited to investigate the case, it struck a low pig-pen located by a high barn, incidentally killing the pigs ,the barn itself being untouched. Now let us return to the building grounded from the peak. Suppose a stroke occurs at the eave or part way between there and the peak. The current will not travel upward to

(*Continued on page* 136.)

Definitions of Foreign Trade Terms Adopted

American Trade Bodies, After a Conference, Agree on Standard Definition of Such Frequently-Used Terms as F.O.B.; C.&F.; C.I.F.; F.A.S., etc. —Much Confusion Might Be Avoided by Recognition of Definitions

Interpretation of the terms, f.o.b., c. and f., c.i.f., f.a.s., etc., so frequently used in commercial transactions, has at times been so diverse that a good deal of confusion has resulted through a misunderstanding of just what is intended. To obviate this difficulty, and produce a uniformity of use of the terms, a conference was recently held by representatives of a number of trade organizations in the United States, including the National Foreign Trade Council, Chamber of Commerce of the U.S.A., National Association of Manufacturers, American Manufacturers' Export Association, Philadelphia Commercial Museum, American Exporters' and Importers' Association, Chamber of Commerce of the State of New York, New York Produce Exchange, and New York Merchants' Association. The conference finally adopted what is termed the American Foreign Trade Definitions, which cover the terms and conditions of sale, particularly on export shipments.

As members of the C.M.A. will doubtless be interested in this standardization of terms, the definitions of the conference are reproduced herewith:

As the most certain means of insuring unmistakable clarity in terms and conditions of sale, the conference voted to recommend to manufacturers and exporters that all use of abbreviated forms of export price quotations be abandoned, and that such terms be written out in full.

The conference recognized, however, that this recommendation is not likely to be accepted generally at once, and therefore, in the hope of effecting a simplification and standardization of American practice, it adopted the following statement of definitions of the abbreviated forms in more common and general use in the export trade: The conference strongly recommends to manufacturers and exporters that wherever abbreviated forms of export quotations are employed the forms herein defined be used, as far as possible, to the exclusion of other forms.

Definitions of Export Quotations

Trere are, in their order, the normal situations on which an export manufacturer or shipper may desire to quote prices. It is understood that unless a particular railroad is specified the property will be delivered to the carrier most conveniently located to the shipper. If the buyer, for the purpose of delivery, or in order to obtain lower transportation charges, desires that the goods be delivered to a carrier further removed from the shipper, and entailing a greater cost than delivery to the carrier most favorably situated, the carrier to which the buyer desires delivery of the goods should be named in the quotation. The terms "cars or lighters," as used herein, is intended to include river, lake, or coastwise ships, canal boats, barges, or other means of transportation, when so specified in the quotation.

1. When the price quoted applies only at inland shipping point and the seller merely undertakes to load the goods on or in cars or lighters furnished by the railroad company serving the industry, or most conveniently located to the industry, without other designation as to routing, the proper term is:

"F.o.b. (named point)."

Under this quotation:

A. Seller must—

(1) Place goods on or in cars or lighters;

(2) Secure railroad bill of lading;

(3) Be responsible for loss and/or damage until goods have been placed in or on cars or lighters at forwarding point and clean bill of lading has been furnished by the railroad company.

B. Buyer must—

(1) Be responsible for loss and/or damage incurred thereafter;

(2) Pay all transportation charges, including taxes, if any;

(3) Handle all subsequent movement of the goods.

2. When the seller quotes a price including transportation charges to the port of exportation without assuming responsibility for the goods after obtaining a clean bill of lading at point of origin, the proper term is:

"F.o.b. (named point) freight prepaid to (named point on the seaboard.)"

Under this quotation:

A. Seller must—

(1) Place goods on or in cars or lighters:

(2) Secure railroad bill of lading;

(3) Pay freight to named port;

(4) Be responsible for loss and/or damage until goods have been placed in or on cars or lighters at forwarding point and clean bill of lading has been furnished by the railroad company.

B. Buyer must—

(1) Be responsible for loss and/or damage incurred thereafter;

(2) Handle all subsequent movement of the goods;

(3) Unload goods from cars;

(4) Transport goods to vessels;

(5) Pay all demurrage and/or storage charges;

(6) Arrange for storage in warehouse or on wharf where necessary.

3. Where the seller wishes to quote a price, from which the buyer may deduct the cost of transportation to a given point on the seaboard, without the seller assuming responsibility for the goods after obtaining a clean bill of lading at point of origin, the proper term is:

"F.o.b. (named point) freight allowed to (named point on the seaboard)."

Under this quotation:

A. Seller must—

(1) Place goods on or in cars or lighters;

(2) Secure railroad bill of lading;

(3) Be responsible for loss and/or damage until goods have been placed in or on cars or lighters at forwarding point, and clean bill of lading has been furnished by the railroad company.

B. Buyer must—

(1) Be responsible for loss and/or damage incurred thereafter;

(2) Pay all transportation charges (buyer is then entitled to deduct from the amount of the invoice the freight paid from primary point to named port):

(3) Handle all subsequent movement of the goods;

(4) Unload goods from cars;

(5) Transport goods to vessel;

(6) Pay all demurrage and/or storage charges;

(7) Arrange for storage in warehouse or on wharf where necessary.

4. The seller may desire to quote a price covering the transportation of the goods to seaboard, assuming responsibility for loss and/or damage up to that point. In this case, the proper term is:

"F.o.b. cars (named point on seaboard)."

Under this quotation:

A. Seller must—

(1) Place goods on or in cars;

(2) Secure railroad bill of lading;

(3) Pay all freight charges from forwarding point to port on seaboard;

(4) Be responsible for loss and/or damage until goods have arrived in or on cars at the named port.

B. Buyer must—

(1) Be responsible for loss and/or damage incurred thereafter;

(2) Unload goods from cars;

(3) Handle all subsequent movement of the goods;

(4) Transport goods to vessel;

(5) Pay all demurrage and/or storage charges;

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(6) Arrange for storage in warehouse or on wharf where necessary.

5. It may be that the goods, on which a price is quoted covering the transportation of the goods to the seaboard, constitute less than a carload lot. In this case the proper term is:

"F.o.b. cars (named port), l.c.l."

Under this quotation:

(1) Deliver goods to the initial carrier;

(2) Secure railroad bill of lading;

(3) Pay all freight charges from forwarding point to port on seaboard;

(4) Be responsible for loss and/or damage until goods have arrived on cars at the named port.

B. Buyer must—

(1) Be responsible for loss and/or damage incurred thereafter;

(2) Handle all subsequent movement of the goods;

(3) Accept goods from the carrier;

(4) Transport goods to vessel;

(5) Pay all storage charges;

(6) Arrange for storage in warehouse or on wharf where necessary.

6. Seller may quote a price which will include the expense of transportation of the goods by rail to the seaboard, including lighterage. In this case the proper term is:

"F.o.b. cars (named port), lighterage free."

Under this quotation:

A. Seller must—

(1) Place goods on or in cars;

(2) Secure railroad bill of lading;

(3) Pay all transportation charges to, including lighterage at, the port named:

(4) Be responsible for loss and/or damage until goods have arrived on cars at the named port.

B. Buyer must—

(1) Be responsible for loss and/or damage incurred thereafter;

(2) Handle all subsequent movement of the goods;

(3) Take out the insurance necessary to the safety of the goods after arrival on the cars;

(4) Pay the cost of hoisting goods into vessel where weight of goods is too great for ship's tackle;

(5) Pay all demurrage and other charges, except lighterage charges.

7. The seller may desire to quote a price covering delivery of the goods alongside overseas vessel and within reach of its loading tackle. In this case the proper term is:

"F.a.s. vessel (named port)."

Under this quotation:

A. Seller must—

(1) Transport goods to seaboard;

(2) Store goods in warehouse or on wharf if necessary, unless buyer's obligation includes provision of shipping facilities;

(3) Place goods alongside vessel either in a lighter or on the wharf;

(4) Provide the usual dock or ship's receipt;

(5) Be responsible for loss and/or damage until goods have been delivered alongside the ship or on wharf.

B. Buyer must—

(1) Be responsible for loss and/or damage thereafter, and for insurance;

(2) Handle all subsequent movement of the goods;

(3) Pay cost of hoisting goods into vessel where weight of goods is too great for ship's tackle.

8. The seller may desire to quote a price covering all expenses up to and including delivery of the goods upon the overseas vessel at a named port. In this case the proper term is:

"F.o.b. vessel (named port)."

Under this quotation:

A. Seller must—

(1) Meet all charges incurred in placing goods actually on board the vessel;

(2) Provide the usual dock or ship's receipt;

(3) Be responsible for all loss and/or damage until goods have been placed on board the vessel.

B. Buyer must—

(1) Be responsible for loss and/or damage thereafter;

(2) Handle all subsequent movement of the goods.

9. The seller may be ready to go farther than the delivery of his goods upon the overseas vessel, and be willing to pay transportation to a foreign point of delivery. In this case the proper term is:

"C. and f. (named foreign port)."

Under this quotation:

A. Seller must—

(1) Make freight contract and pay transportation charges sufficient to carry goods to agreed destination;

(2) Deliver to buyer or his agent clean bills of lading to the agreed destination;

(3) Be responsible for loss and/or damage until goods have been delivered alongside the ship and clean ocean bill of lading obtained (seller is not responsible for delivery of goods at destination).

B. Buyer must—

(1) Be responsible for loss and/or damage thereafter and must take out all necessary insurance;

(2) Handle all subsequent movement of the goods;

(3) Take delivery and pay costs of discharge, lighterage, and landing at foreign port of destination in accordance with bill of lading clauses;

(4) Pay foreign customs duties and wharfage charges, if any.

10. The seller may desire to quote a price covering the cost of the goods, the marine insurance on the goods, and all transportation charges to the foreign point of delivery. In this case the proper term is:

"C.i.f. (named foreign port)."

Under this quotation:

A. Seller must—

(1) Make freight contract and pay freight charges sufficient to carry goods to agreed destination;

(2) Take out and pay for necessary marine insurance;

(3) Deliver to buyer or his agent clean bills of lading to the agreed destination and insurance policy and/or negotiable insurance certificate;

(4) Be responsible for loss and/or damage until goods have been delivered alongside the ship, and clean ocean bill of lading and insurance policy and/or negotiable insurance certificate have been delivered to the buyer or his agent. (Seller is not responsible for the delivery of goods at destination nor for payment by the underwriters of insurance claims.)

(5) Provide war-risk insurance, where necessary, for buyer's account.

B. Buyer must—

(1) Be responsible for loss and/or damage thereafter, and must make all claims to which he may be entitled under the insurance directly on the underwriters;

(2) Take delivery and pay costs of discharge, lighterage, and landing at foreign port of destination in accordance with bill-of-lading clauses;

(3) Pay foreign customs duties and wharfage charges, if any.

Explanation of Abbreviations

F.o.b., free on board.
F.a.s., free alongside.
C. and f., cost and freight.
C.i.f., cost, insurance, and freight.
L.c.l., less-than-carload lot.

General Recommendations

In reaching the conclusions set forth in this statement the conference considered the fact that there are in more or less common use by manufacurers in different parts of the United States numerous variations of the abbreviations practically all of which are employed to convey meanings substantially synonymous with those here defined. For instance, there are manufacturers who quote "f.o.b. cars," "f.o.b. works," f.o.b. mill," or "f.o.b. factory," meaning that the seller and buyer have the same responsibilities as those set forth in section 1. The conference considered all those variations and determined to recommend the use of "f.o.b. (named point)," as "f.o.b. Detroit," "f.o.b. Pittsburgh," etc. Of the considerable number of these abbreviations which are used in the United States, the conference felt that the form "f.o.b. (named point)" is most widely used and understood, and therefore should be adopted as the standard of practice.

The chief purpose of the conference is to simplify and standardize American practice, and to that end it urges manufacturers and exporters to cease the use of synonymous abbreviations and quote habitually in the terms here recommended, just as far as these terms will cover the price conditions which it is desired to arrange with the buyer.

Variations of the abbreviations recommended in other sections also are in more or less common use throughout the United States. The recommendations of the conference set forth above apply to them with the same force as to those cited under section 1.

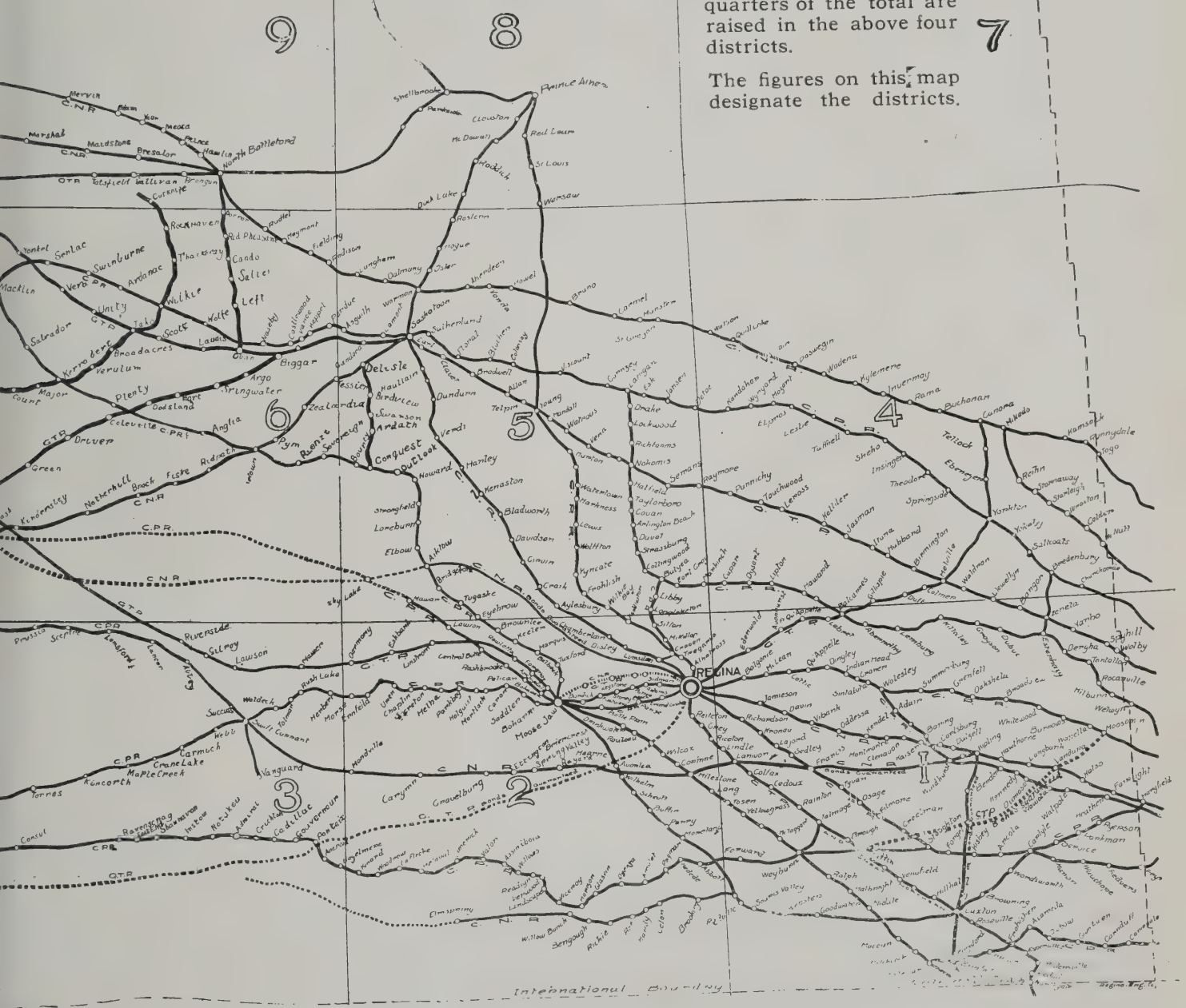
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1920

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In districts Nos. 1, 2, 4 and 5 are two-thirds of the population of the Province, and over two-thirds of the grain of the Province is raised in these four districts. Of the 1,870,123 head of stock in the Province, three-quarters of the total are raised in the above four districts.

The figures on this map designate the districts.



REGINA, the capital city of Saskatchewan is situated on the main line of the Canadian Pacific Railway, Grand Trunk Pacific Railway and Canadian National Railway. It is the principal city between Winnipeg and Calgary, lying 357 miles west of Winnipeg and 483 miles east of Calgary.

REGINA is the largest distributing centre of Western Canada and, as a distributor of farm implements, the greatest in the world, business in this line in one year having reached a total of over $25,000,000.

REGINA is the distributing centre, the commercial centre and the educational centre of this part of Western Canada. Building construction already arranged for, in 1920, amounts to $4,500,000. Every lot in the wholesale area is served with railway tracks; a large portion of the area is still available for building purposes and may be obtained from the City.

For further information apply to L. T. McDONALD, Board of Trade, Regina or Commissioner L. A. THORNTON, City Hall, Regina

Manufacturers and exporters are urged to bear in mind that the confusion and controversies which have arisen have sprung, in part, from the use of an excessive number of abbreviated forms with substantially similar meanings, as well as from the use of abbreviations in a sense different from their original meanings, or in an application not originally given them and different from the sense or application understood by foreign buyers.

In simplified and standardized practice lies the best hope of reducing confusion and avoiding controversy.

The conference urges upon manufacturers and exporters the very great importance at all times of making their intention in whatever quotations they employ so thoroughly clear as to be impossible of misunderstanding or misinterpretation. It is much better to take the time and space at the outset to make the quotation clearly understood than to be compelled in the end to go through vexatious controversy or litigation, which costs not only time and expense but customers as well. Misunderstandings can best be avoided if the seller will formulate a written statement of the general conditions under which his sales are to be made, and will see that the foreign buyer possesses these terms of sale when considering a quotation. The items which may be included in such a statement deal with delivery, delays, partial shipments, shipping instructions, inspection, claims, damage, and payment. If all contingencies are thus covered by carefully considered conditions of sale, disputes will largely be prevented.

The quotation "f.o.b. (named port)," as "f.o.b. New York," "f.o.b. New Orleans," "f.o.b. San Francisco," is often used by inland producers and distributors to mean merely delivery of the goods at railway terminal at the port named.

This abbreviation originated as an export quotation and had no application to inland shipments. It was used only to mean delivery of the goods upon an overseas vessel at the port named. That, in fact, is the meaning universally given to the phrase among foreigners, and is the meaning which the best practice among exporters requires it invariably to have. But because of the confusion which has arisen through the use of that form with a different meaning by inland producers and distributors, and, in the interest of unmistakable clarity, the conference most strongly urges the invariable use by American manufacturers and exporters of the form "f.o.b. vessel (named port)." This adds only one word to the abbreviated form and has the great advantage that it can not be misunderstood. It also avoids the difficulty which might arise among foreigners not always well versed in American geography, through confusing an inland forwarding point with a shipping port at seaboard.

The conference calls attention to the fact that in selling "f.a.s. vessel," manufacturers and exporters should be careful to have their agreements with buyers cover explicitly the question of responsibility for loss after goods have been delivered on the wharf or alongside the vessel, and before they are actually loaded on the ship. There is no generally established practice on this point. The recommendation of the conference in the definitions of responsibility, under section 7, sets up a rule which it is hoped will lead to the establishment of a standard practice.

It is understood that the provision of lighterage covered in several of these recommendations is only within the usual free-lighterage limits of the port, and that where lighterage outside such limits is required it is for buyer's account.

In order to avoid confusion in another particular, attention is called to the care which must be exercised in all cases in making weight quotations. The net ton, the gross ton, and the metric ton, all differ in weight. Similarly, there is a variation in the use of the term "hundredweight," to mean either 100 pounds or 112 pounds. It is, therefore, not sufficient to quote a price per "ton" or "per hundredweight." Instead, the conference recommends the use of the terms "ton of 2,000 pounds," "ton of 2,240 pounds," or "ton of 2,204 pounds," etc., whichever is intended.

It is also important to note that a carload lot in the United States means the quantity of the particular commodity in question necessary to obtain the carload freight rate for transportation on American railways. This quantity varies according to the commodity and also varies in different parts of the country. Certain commodities being more bulky than others, the minimum carload for them is less than for heavier products occupying less space. The load required may range anywhere from 12,000 to 90,000 pounds. Consequently, it is important, when quoting prices applicable to carload lots, to so state and to specify the minimum weight necessary to make a carload lot of the particular commodity for the particular shipment in question.

The conference points out that in quoting "c. and f." or "c.i.f.," manufacturers and exporters moving large quantities of material by one vessel should be careful to ascertain in advance the buyer's capacity to take delivery. This because, under these terms and as a condition of making the freight rate, transportation companies may require a certain rate of discharge per day, and that rate of discharge might be in excess of the buyer's capacity to take delivery. In such event an adjustment with the transportation company would be necessary, which might affect the freight rate, and consequently the price to be quoted.

The conference also strongly urges shippers clearly to understand the provisions of their insurance protection on all foreign sales, irrespective of the general terms used thereon. In almost all cases it should be possible, when making shipments by steamer, to obtain insurance cover, giving full protection from primary shipping point to designated seaport delivery, and/or foreign-port delivery. As ordinary marine insurance under f.p.a. conditions, i.e., free of particular average, gives no protection against deterioration and/or damage to the merchandise itself while in transit, when caused by the recognized hazards attending such risks, shippers should endeavor in all cases to obtain insurance under w.p.a. (s.p.a.) conditions, i.e., with particular average (subject to particular average), when in excess of the customary franchise of 3 per cent. to 5 per cent. Under such form of insurance underwriters will be called upon to pay claims for damages when these exceed the stipulated franchise.

The conference points out that inasmuch as fees for consular invoices and similar items are arbitrary charges fixed by foreign Governments, they are not included in the terms of c. and f. or c.i.f. quotations, and it is part of the duty of the buyer to meet them.

Finally, the conference strongly recommends, as a most effective measure of simplification, the general practice of quoting for export, as far as possible, either "f.a.s. vessel," "f.o.b. vessel," or "c.i.f." Concentration on this small list, all of which terms are readily understood abroad and are difficult of misinterpretation, will, it is felt, be markedly influential in avoiding confusion and controversy.

The conclusions and definitions set forth above are the recommendations of a conference which was composed of representatives of nine of the great commercial organizations of the United States interested in foreign trade. Not all have as yet the force of law or long-established practice, but it is the hope and expectation of the conference that these recommendations will receive such adherence on the part of American producers and distributors as to make them in fact the standard of American practice. And it is, therefore, expected that in due time they will receive the sanction of legal authority.

Shipment of Eggs

Members are Urged to Co-operate with Express Companies by Packing Eggs Properly

The Express Traffic Association of Canada have issued a circular, No. 96, referring to the requirements of the Express Classification on page 14, item 16, in connection with shipment of eggs in cases. This circular is addressed to the attention of employees, and requires that they adhere to the regulations set forth in the above mentioned item. It is stated the highly perishable and fragile nature of eggs makes it difficult to prevent breakage even with the best of packing, and careless handling in transit only aggravates the matter. It is therefore, necessary that eggs be given the careful handling they require.

The circular then goes on to state the different causes of damage such as breakage, extreme cold, heat, moisture and bad odors. The boys are also directed to refuse any containers which are not in sound condition, and to notify shippers that first-class fillers must be used as well as cushioning material in both the top and bottom of the cases.

All members who are interested in the handling of eggs should assist the express companies in their endeavor to have the goods properly protected and handled while in their care

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Track Scale Allowances

Railway Companies Likely to Put New Scale into Effect at an Early Date

The Board of Railway Commissioners on February 24th, 1920, issued General Order No. 283, in connection with track scale allowances. The judgment in connection with this question was reported in INDUSTRIAL CANADA of January, 1920, page 229. The order above referred to is for the purpose of bringing the judgment into effect. No date has been set for the changes ordered, but it is understood the railway companies will put them into effect at an early date.

For the information of our members the following is submitted:—

TRADE SCALE ALLOWANCE..

Comparison of allowances at present named in tariffs of the carriers with those ordered by the Board of Railway Commissioners in General Order No. 283, dated Ottawa, February 24, 1920:

Commodity.	Car.	Maximum Allowances. Present.	Proposed.
Agricultural Implements.			
Machinery	A	x1,000	x650
Stoves	B	x1,500	x650
Vehicles—all kinds (see Note 1).			
Acid, in carboys (see Note 3)	C	1,000	x650
Ashes		(1) 500	Cancelled
		(2) 1,000	Cancelled
Bark	A	(1) (2) 500	Cancelled
	D	(1) 2,500	1,000
		(2) 2,000	1,000
	E	(1) 1,000	1,000
		(2) 500	1,000
Lumber and other forest products not elsewhere provided	A	(1) (2) 500	Cancelled
	B	(1) 1,000	*500
		(2) 500	*500
Perishable Freight.	F	1,500	†2,000
	G	2,000	†2,500
Woodpulp (wet)		1,000	Cancelled
General—To cover weight of standards, strips, stakes, supports and temporary racks—does not apply on agricultural implements, machinery, street cars, vehicles, bark	B	500	500
Foreign Matter—Not part of lading, such as snow, ice, manure or refuse in or on cars.	A	Note 2	Note 2
	B		

A—Box or stock cars.
B—Flat or gondola cars.
C—Box or single deck stock cars.
D—Flat or gondola cars with temporary racks.
E—Flat or gondola cars with permanent racks.
F—Box or stock cars lined with lumber by shipper.
G—Box or stock cars lined with lumber by shipper and containing fuel and stove.
(1) December 1st to April 30th.
(2)—May 1st to November 30th.
X—Actual weight but not more than the maximum shown—shipper must certify as to weight on shipping order and bill of lading.
*Actual weight when ascertainable, but not more than maximum shown—shipper must certify as to ascertained weight on shipping order or bill of lading.
†Lumber—actual weight, but not more than 800 ft. board measure at 2½ lbs. per ft. (2,000 lbs.).
Stove and fuel—actual weight, but not more than 500 lbs. in addition to above.
Note 1—Present allowance does not include self-propelled vehicles—proposed allowance will include all kinds.
Note 2—At present allowance for snow, ice, refuse obsorption of moisture is included in weight—allowances under proposed will be an estimated allowance adequate to actual conditions in each case at time of weighing.
Note 3—At present allowance applies only on shipments from points east of Fort William to points west thereof. Proposed allowance will apply between all points in Canada.

From the above, it will be seen that, generally speaking, the new maximum allowance for dunnage will be 500 lbs., or the same as at present; on agricultural implements, machinery, stoves and vehicles, it will be 650 lbs.

In connection with vehicles, it might be pointed out that automobiles and other self-propelling vehicles are not now provided with an allowance. The extension of the allowance to cover such vehicles will be of interest to the automobile industries.

The allowance on bark has been made the straight 1,000 lbs., as against the present varying amount from 500 to 2,500 lbs.

As regards the question of snow, ice and refuse, the maximum allowance is now generally about 500 lbs., whereas under the order it must be the actual amount in each case, but this is to be allowed by the carriers' weighmen.

Steamship Sailings

Proposed Sailings from West St. John, St. John, Halifax and Portland in the Near Future

West St. John to Liverpool

Empress of France..C.P.O.S. Line .....Ab't Apl. 10
*Canadian Voyageur, Can. Govt. Mer. Marine, Ltd...Ab't Apl. 24
*Sails from St. John.

West St. John to London

Montcalm .....C.P.O.S.-Furness Line (C.P.O.S.)Ab't Apl. 8
Grampian .....C.P.O.S.-Furness Line (C.P.O.S.)Ab't Apl. 9
*Canadian Navigator, Can. Govt. Mer. Marine, Ltd...Ab't Apl. 21
*Sails from St. John.

West St. John to Antwerp

Scandinavian .....C.P.O.S.-Furness Line (C.P.O.S.)Ab't Apl. 16

West St. John to Avonmouth Dock (Bristol)

Sardinian .....C.P.O.S. Line .....Ab't Apl. 16

West St. John to Australasian Ports—Melbourne, Sydney, Brisbane, Auckland, Wellington and Dunedin

Ajana .....New Zealand S.S. Company....Ab't Apl. 28

St. John to Kingston, Jamaica and Havana, Cuba

Canadian Warrior ..Can. Govt. Mer. Marine, Ltd....Ab't Apl. 23

Halifax to Havana, Cuba

Canadian Trader ...Can. Govt. Mer. Marine, Ltd....Ab't Apl. 24

Halifax to Barbados, Trinidad and Demerara

Canadian Gunner ..Can. Govt. Mer. Marine, Ltd....Ab't Apl. 10

Halifax to Santiago (Cuba) and Kings (Jamaica)

Watuka .....Pickford & Black .....Ab't Apl. 10

Portland to Liverpool

Canada .....White Star-Dominion Line....Ab't Apl. 17

Portland to London

Ardgoil .....Cunard Line .....Ab't Apl. 10

Portland to Glasgow

Cassandra .....Anchor-Donaldson Line.....Ab't Apl. 9

Portland to Avonmouth

Cornishman .....Dominion Line .....Ab't Apl. 17

West St. John to Belfast and Dublin

Dunaff Head .....Head Line .....Ab't Apl. 10

West St. John to Montevideo, Buenos Ayres and Rosario (South America)

A steamer .....Houston Lines .....Ab't Apl. 20

West St. John to South Africa—Cape Town, Port Elizabeth, East London, Durban and Delagoa Bay

Benguela ..... Elder-Dempster Line .....Ab't Apl. 20

Halifax to Glasgow

Canadian Aviator ..Can. Govt. Mer. Marine, Ltd....Ab't Apl. 24

Halifax to Buenos Ayres, Argentine (Calling at Pernambuco)

Canadian Stigneur..Can. Govt. Mer. Marine, Ltd...Ab't Apl. 30

Demurrage

Association's Application in Connection with the Average Agreement Has Been Dismissed

The Assistant Chief Commissioner Board of Railway Commissioners, Ottawa, on January 26th, completed a judgment dealing with the "average agreement" in connection with the application of the Canadian Manufacturers' Association for an order directing the extension of the Canadian Car Demurrage Rules for the purpose of including this agreement.

On February 6th this judgment was concurred to by the Chief Commissioner and Commissioners Goodeve, Boyce and Rutherford, and was sent to the Association on February 27th.

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THE advertiser is a Canadian, at present satisfactorily connected with a Company (as General Works Manager) employing 2,100 men in two widely separated plants. For personal and family reasons desires to return to Canada.

Has had many years experience in charge of design and manufacturing of gas engines (marine and stationary) oil engines, tractors, auto parts of all kinds, boilers and engines (marine and stationary), structural and platework, contractors' equipment and dredges, etc.

Thoroughly experienced in all metal working processes, and the management of foundries producing steel, grey iron and brass castings, drop and hammer forging shops, machine shops, pattern and woodworking departments, metal heat treating departments, also the management of engineering and drafting departments.

Understands sales and general business.

Very successful in organizing and planning for profitable production; thoroughly understands the control of indirect costs and the making of budgets for same.

45 years of age and in good health.

Seeking connection with a worth-while concern which will pay a good salary for profitable operation of its plant.

Position wanted is that of General Manager or Works Manager and must be permanent.

Prefers location in or near Toronto.

Write Box 200, Industrial Canada, Toronto.



Our Modern Plant is fully equipped to supply castings of every description in

MILD STEEL
CHROME
CHROME NICKEL
CARBON
MANGANDIMIAND
VANADIUM

Let us quote you

Hull Iron & Steel Foundries, Ltd.
HULL QUEBEC

Here is your future Superintendent.



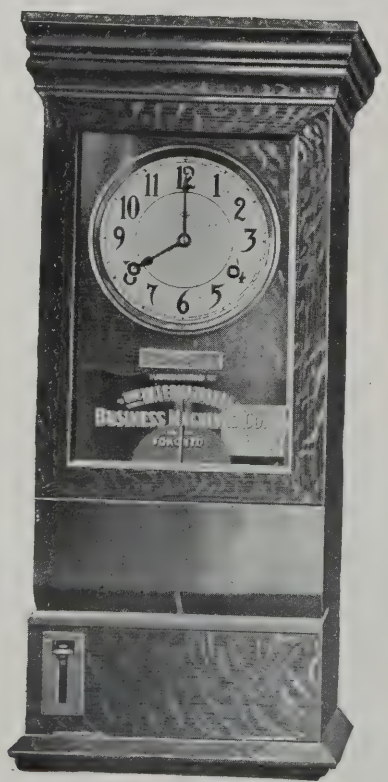
Here is the Machine that helps you find Him.

HE'S one of your producers! The "International" Job Time Recorder finds him for you. There are other good workers, and there are also non-producers.

¶ It is production you are after and this International Job Time Recorder will show you exactly where you are getting it. Automatically printed on each Job Card is the exact starting and stopping time on each and every operation.

¶ The International unerringly records the points of high and excessive production costs through every stage of manufacture—indicates the inefficient workmen, the non-producers and helps you clear out the "deadwood." Best of all, it ***shows the men who are producing*** and develops them by stirring up lively competition. You can ***watch them grow,*** and out of this group who take an interest in your business you'll pick your "Job Bosses" and, when the time comes, your Assistant Foremen.

Why keep your modern machinery hitched to an ancient time and cost recording system when an International Job Recorder will help you "jump" production records to the peak?



International Job Time Recorder

There's an International for every business. Let us send you our literature.

International Business Machines Company, Limited

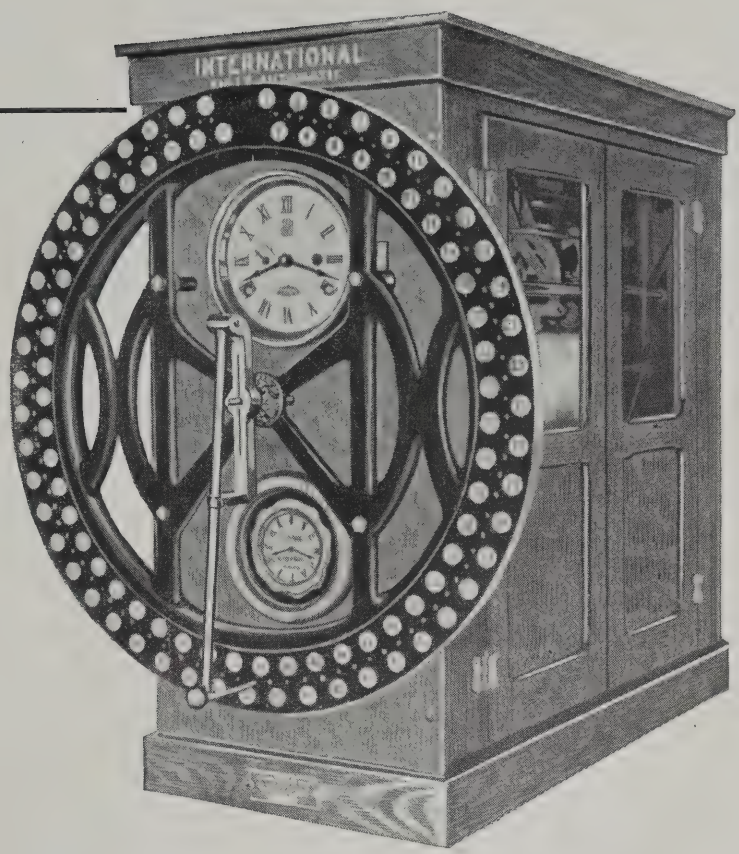
Time Recorder Division

FRANK E. MUTTON, Vice-President and General Manager

Head Office and Factory: Campbell Ave., Toronto, Ont.

Branches in all Principal Cities

(Also makers of Hollerith Electric Tabulators and Dayton Computing Scales)



Labor time is the most costly raw material you buy

What kind of a jolt would you give your bookkeeping department if you found they did not have a real, efficient, practical, infallible check on the materials you buy?

Why not have just exactly that kind of a check on the labor time you buy? Why stick to an old-fashioned, cumbersome time-keeping system dependent on the "human element" for its efficiency, impartiality and reliability?

This is the age of machines. Check your labor time purchases by a machine. Ninety-eight per cent. of the world's successful firms do so, and we've supplied ninety-five per cent. of ***them.***

We supply time-keeping systems for any and every purpose or business

International Business Machines Company Limited

Time Recorder Division

Head Office and Factory
Campbell Ave., Toronto, Ont.

FRANK E. MUTTON
Vice-President and General Manager

Branches in all Principal Cities

(Also makers of Hollerith Electric Tabulators and Dayton Computing Scales)

The judgment dismisses our application on the following grounds:—

1. That the consignee has no right to an allowance for any time between the actual time used in unloading cars, and the free time period of 48 hours.

2. That this plan (average agreement) would be discriminatory as between different sections of the shipping public; in other words, the larger manufacturer or shipper would have an advantage over a smaller manufacturer or shipper.

3. The adoption of the plan would not increase the car supply available at any given time.

In support of the first point, numerous cases have been cited, particularly English Law.

The Royal Bank of Canada announces the opening of branches at Santos and Sao Paulo, Brazil. With a branch already located at Rio de Janerio, this makes three branches now doing business in Brazil.

EXCELLENT FACTORY SITE

FOR SALE OR LEASE

Location.—Live town on lake front close to Toronto, with fine harbors, 3 transcontinental railways and 7,000 population. **Power.**—250 electric horse-power, fully developed, including cement dam, water-wheels, large brick power house and other buildings with abundant additional hydro electric power available if desired. **Labor.**—Supply will be found most satisfactory, both male and female. This is a splendid opportunity for either a new industry or branch of existing industry requiring immediate supply of power and labor and first-class shipping facilities. Special inducements offered.—Address Box 100, Industrial Canada, 1301 Bank of Hamilton Building, Toronto.



W. C. Macdonald, Reg'd

Incorporated

MONTREAL - CANADA

Prospects for Industries

Some of the possibilities for future industrial developments in British Columbia

Mr. W. C. Oliver, of the Douglas Fir Turpentine Company, California, is advocating a new industry for British Columbia. Wonderful possibilities are connected with it. The matter has been brought before the Provincial Government. Mr. Oliver describes the Douglas fir as the most valuable economic timber in the world. It can be made to produce hundreds of millions of dollars worth of turpentine, resin and other by-products, while, at the same time, the timber growth of the tree will be enormously accelerated. His list of more than 100 staple commercial articles that can be manufactured from the by-products of the forest opens up an amazing vista—from the fibre silk to the Japanese silk (so much used in hosiery), to linoleum, resins and acids.

Sir George Bury, on a recent return from the Whalen Pulp Mills, up the Coast, was enthusiastic about the manufacture of underwear from pulp fibre.

Professor John Davidson, Botanist of the British Columbia University, Vancouver, has discovered a certain kind of Douglas fir tree that grows in the Dry Belt of British Columbia, whose leaves exude a fine white sugar in masses of one-quarter of an inch to two inches in thickness. Indians have known of and used this sugar for centuries, and there has been no time when grizzly bears did not feast upon it. Professor Davidson says its use in medicine and chemistry may be very important, and now remains only to be brought out by chemist investigators.

Palladium has been found in a copper mine discovered up the coast from Vancouver. Being one of the richest known metals, this discovery will add greatly to the wealth of British Columbia.

An iron, equal to the best Norwegian metal, is now being produced in British Columbia.

British Columbia magnite ore is now being transported 400 miles by water to Seattle, and is there smelted successfully in an electric smelter in less than two hours' time. A company is being formed in Vancouver to do similar work.

During the war a process of refining zinc was discovered and worked out at the Trail smelter, B.C., and many trainloads of zinc slabs were shipped by rail to Vancouver and over-the-world by steamships.

Had Many Interests

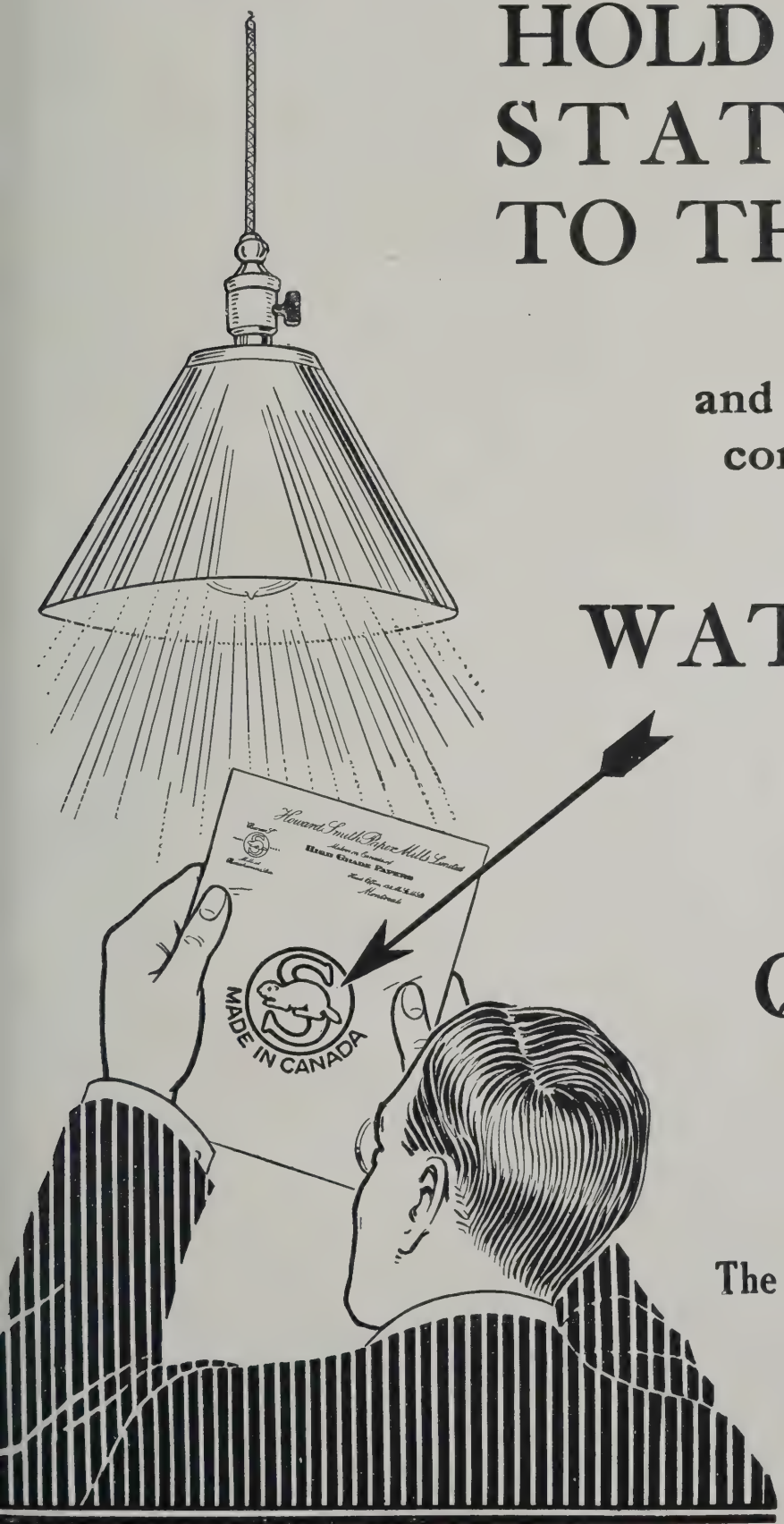
Late John Whyte, of Stratford, Took Foremost Part in Industrial Life of City

John Whyte, president of the Whyte Packing Co., Stratford, whose death after a long period of ill-health occurred on March 14, was an honored citizen with widespread business interests. A native of Scotland, he began business life in the meat business in Mitchell, being associated with his father. On the death of the latter, he removed the industry to Stratford, erecting the big plant of the Whyte Packing Co. in 1899. He was also interested in the Stratford Brass Co., Macdonald Thresher Co., Avon Knit Mills and other local industries, besides taking an active share in the work of the Board of Trade, Board of Health, Hospital Board and Children's Aid Society.

PATENT FOR SALE

Patent for sale on Lamp Chimney Holder. Simple and inexpensive to manufacture. Will sell outright for cash or sell right to manufacture in Canada. Stays on burner when chimney is pulled off, but may be removed or put on any time. Miss Amanda Halverson, Delavan, Minn.

HOLD UP YOUR STATIONERY TO THE LIGHT



and see that it contains this

WATERMARK

It is your guarantee for

QUALITY

-Made-in-Canada—

BY

The Howard Smith Paper Mills
LIMITED

138 McGill St., MONTREAL

MILLS AT

BEAUHARNOIS, QUE. and
CRABTREE MILLS, QUE.



BANK OF HAMILTON

48th Annual Statement

28th FEBRUARY, 1920

BOARD OF DIRECTORS

SIR JOHN HENDRIE, K.C.M.G., C.V.O., President.
CYRUS A BIRGE, Vice-President.

C. C. DALTON — ROBT. HOBSON — W. E. PHIN
I. PITBLADO, K.C. — J. TURNBULL. — W. A. WOOD

F. E. KILVERT, Western Superintendent. — J. P. BELL, General Manager.

TO THE PUBLIC

LIABILITIES

Notes of the Bank in Circulation		$5,941,901 00
Deposits not bearing interest	$23,692,537 71	
Deposits bearing interest, including interest accrued to date of statement	44,973,167 61	
		68,665,705 32
Balances due to other Banks in Canada		144,690 79
Balances due to Banks and Banking Correspondents in the United Kingdom		82,137 21
Balances due to Banks and Banking Correspondents elsewhere than in Canada and the United Kingdom		591,154 79
Acceptances under Letters of Credit		301,046 96
		$75,726,636 07

TO THE SHAREHOLDERS

Capital Stock paid in	4,000,000 00
Reserve Fund	4,200,000 00
Balance of Profits carried forward	85,249 74
Dividend No. 123, payable 1st March, 1920	119,935 03
Former Dividends unpaid	2,288 50
	$84,134,109 34

ASSETS

Gold and Current Coin	$929,035 84
Dominion Government Notes	8,236,369 00
Deposit in Central Gold Reserves	1,750,000 00
Deposit with the Minister of Finance for the purposes of the Circulation Fund	200,000 00
Notes of other Banks	616,659 00
Cheques on other Banks	2,925,419 17
Balances due by other Banks in Canada	663,515 35
Balances due by Banks and Banking Correspondents elsewhere than in Canada	790,992 55
	$16,111,990 91
Dominion and Provincial Government Securities, not exceeding market value	2,427,615 07
Canadian Municipal Securities, and British, Foreign and Colonial Public Securities other than Canadian	7,485,827 40
Railway and other Bonds, Debentures and Stocks, not exceeding market value	472,316 90
Call and Short Loans (not exceeding thirty days) in Canada, on Bonds, Debentures and Stocks	8,169,905 14
	$34,667,655 42
Other Current Loans and Discounts in Canada (less rebate of interest)	45,318,138 57
Real Estate other than Bank Premises	355,626 26
Overdue Debts, estimated loss provided for	171,096 79
Bank Premises, at not more than cost, less amounts written off	2,808,262 30
Other Assets not included in the foregoing	512,283 04
Liabilities of Customers under Letters of Credit as per Contra	301,046 96
	$84,134,109 34

PROFIT AND LOSS ACCOUNT

Balance at credit of Profit and Loss Account, 28th February, 1919		$85,114 59
Profits for twelve months ended 28th February, 1920, after deducting charges of management, interest accrued on deposits, rebate on current discounts, and making provision for bad and doubtful debts		847,104 86
Premium on New Stock		500,000 00
		$1,432,219 45

APPROPRIATED AS FOLLOWS:

Dividends Nos. 120, 121, 122, 123, at 12 per cent. per annum		469,183 56
To Pension Fund		40,317 96
War Tax on Bank Note Circulation		37,468 19
Transferred to Bank Premises Account		100,000 00
Transferred to Reserve Fund—From Current Profits	$200,000 00	
From Premium on New Stock	500,000 00	
		700,000 00
Balance of Profits carried forward		85,249 74
		$1,432,219 45

RESERVE FUND

Balance 28th February, 1919	$3,500,000 00
Premium on New Stock	500,000 00
Transferred from Profits	200,000 00
	$4,200,000 00

JOHN S. HENDRIE, President.

J. P. BELL, General Manager.

AUDITORS' REPORT

In accordance with the provisions of Sub-sections 19 and 20 of Section 56 of the Bank Act, we report to the Shareholders as follows:

We have examined the above Balance Sheet with the books and vouchers at Head Office and with the certified returns from the Branches, and we have obtained all the information and explanations we have required, and in our opinion the transactions which have come under our notice have been within the powers of the Bank.

We have checked the cash and verified the securities of the Bank at the Chief Office and at several of the principal branches during the twelve months covered by this statement, as well as on February 28th, 1920, and have found that they agreed with the entries in the books of the Bank with regard thereto.

In our opinion the Balance Sheet is properly drawn up so as to exhibit a true and correct view of the state of the Bank's affairs according to the best of our information and the explanations given us, and as shown by the books of the Bank.

C. S. SCOTT, F.C.A., of C. S. Scott & Co.
E. S. READ, C.A., of George A. Touche & Co.
} AUDITORS.

Hamilton, 15th March, 1920.

OFFICE AND FINANCE

The Philosophy of Thrift

By F. W. HARDING

Part I
Methods of Thrift

THRIFT is much written about and often talked of, but very little if anything is said as to a proper method of practising it. The interpretation of the idea ranges from the one who saves every penny to the one who occasionally saves.

One man conceives the idea that thrift means the laying aside of every penny, the denying of himself and those dependent upon him of everything that makes life worth living. He would spend money for only the barest and plainest food and clothing, shriveling his very soul, and stunting the spiritual life of himself and his family. He is rarely a person worth meeting, for he probably denies himself good reading, and has not developed mentally. His apparel is such as to cause him to stay at home and literally bury himself.

Another has the happy-go-lucky idea of saving a little now and then, and somewhere between these two extremes is the level-headed idea of methodical living and saving.

The first example, if followed by all, would at once plunge the country into the direst of financial distress and hard times, and only those engaged in the production of food and cheap clothing would have employment, the rest would be in want. This is a strong statement, but true, and if it causes the thoughtless and miserly to stop and think, it has served a good purpose.

Civilization demands not only necessities, but some luxuries and many semi-luxuries. The large proportion of the population are busily and happily engaged in supplying these wholesome needs. It is easily seen then, that the happy-go-lucky man, in scattering his money freely, helps to make the country prosperous by keeping money in circulation. He would not be able to buy many Government bonds it is true, neither has he done much to provide for a rainy day or for his old age, but he has enabled others to do so. He is the better man of the two extremes at that, for he has added to the happiness of his fellows. It is well for the country, though, that all are not like him, for our prosperity would be fictitious and inflated and there would be no money in the banks to promote enterprises, or to assist the Government when it needs assistance.

Artificial wants and desires create a mental habit of dissatisfaction with life, and it has been found that no ordinary salary, however large, can cover all these desires. A man is happy in proportion to the absence of artificial wants, and it takes firmness of mind and purpose to prevent their creeping in.

A sensible, thrifty man realizes that to properly support his brain he must have plenty of good and wholesome food (but he does not waste it), and that good clothes enhance his self-respect, enabling him to appear among his fellows without embarrassment; also that good reading and music enlarge and exalt the mind and make him a desirable companion and good citizen. By the indulgence of these modest wants he helps others to prosper, and if a man of family, his children are likely to be happy; and a happy childhood is the best kind of foundation for a country's future manhood. His is a simple, fine life and his real needs go no further. These are the people whose lives and savings are methodical; the ones who have bank accounts, and who can buy victory bonds or thrift stamps and provide for old age.

All of this is obtainable at a comparatively small expense above the barest necessities of life, and is within the reach of most people, in proportion to the position of life they occupy.

Part II
How to Get Rich on a Salary

The wailing cry we ever hear is "You can't get rich on a salary." This is the excuse of the self-indulgent and thoughtless. The pity of it is that so many believe it because it is oft repeated.

The word "riches" really does not mean much, for it cannot be defined to the satisfaction of every one. To one man it may mean a comfortable reserve fund that will tide him over adversity, and be large enough to provide for his old age in the way of life he has been accustomed to.

To another, it means unlimited wealth, and to such a man the possession of a half million of dollars would not make him feel rich. Riches are relative. It depends upon our mental attitude toward the world. Each must decide for himself the definition of riches. No ordinary income, however large, will satisfy those who have vain and foolish wants.

It is to the first man that these lines are addressed, and a method outlined. The saving of much money above a fixed scale of comfortable living is altogether dependent upon a *regular habit of saving;* occasional savings will not do it. It is a mathematical proposition entirely, based on the fact that money makes money, and this interest money, and *all raises of salary*, bonuses, etc., go into the reserve fund.

To illustrate: suppose that a man received $125.00 per month and saves $25.00 per month, or $300.00 per year. He received a raise to $150.00 per month, and by keeping on the same scale of living he will save $600.00 per year, or 100 per cent. more saved on a 20 per cent. increase of salary. How many will do this? Very few, but the wise man will if he was comfortable before; at least until his reserve fund warrants an increase in his way of living. To show how money makes money, suppose that the ordinary man at the age of 35 has a reserve of $5,000.00, in 12 years at 6 per cent. this will be $10,000.00, and in 12 years more $20,000.00, without bonuses or increases being taken into account, and this, too, without having saved another cent after 35 years old. It shows plainly that if one kept on saving after 35 years he would accumulate a large sum.

This is an appeal to the young man to form the *habit* and begin saving *regularly now.* The advice is good for the older men too. It is only the old, careless, thoughtless men who originated the saying quoted above. Regularity, *method and habit* of saving bring home the bacon.

Part III
Fear

Fear is mankind's worst inheritance from the remote ages. One can almost imagine the scene when he first ap-

BANK OF MONTREAL

Established over 100 Years

Capital Paid Up - - $20,000,000
Rest - - - - $20,000,000
Undivided Profits, $1,812,854
Total Assets - $545,304,809

BOARD OF DIRECTORS:

Sir Vincent Meredith, Bart., President
Sir Charles Gordon, G.B.E., Vice-President
R. B. Angus, Esq. Lt.-Col. Molson, C.M.G., M.C.
Lord Shaughnessy K.C.V.O. Harold Kennedy, Esq.
C. R. Hosmer, Esq. H. W. Beauclerk, Esq.
H. R. Drummond, Esq. G. B. Fraser, Esq.
D. Forbes Angus, Esq. Colonel Henry Cockshutt
Wm. McMaster, Esq. J. H. Ashdown, Esq.
E. W. Beatty, Esq., K.C.

Head Office: MONTREAL

Sir Frederick Williams-Taylor, General Manager

Branches and Agencies — Throughout Canada and Newfoundland At London, England, and at Mexico City In Paris, Bank of Montreal, (France) In the United States - New York, Chicago, Spokane. San Francisco - British American Bank (owned and controlled by Bank of Montreal).

A GENERAL BANKING BUSINESS TRANSACTED

ESTABLISHED 1875

IMPERIAL BANK
OF CANADA

CAPITAL PAID UP $7,000,000 RESERVE FUND $7,500,000

PELEG HOWLAND, President

The Imperial Bank offers exceptional banking facilities to Canadian Manufacturers. Branches throughout Canada. Agents and correspondents in all the world centres.

Collections made at all points in Canada and in foreign centres.

Drafts—Money Orders and Letters of Credit issued, available throughout the world.

Exchange—Domestic and Foreign Exchange bought and sold.

Government and Municipal Securities dealt in at all branches.

Savings received at all branches—interest credited half yearly at current rate.

Accounts of Merchants and Manufacturers solicited.

HEAD OFFICE - TORONTO

peared on earth and his plight must have been pitiable in the extreme, for he was defenceless as compared to other animals. He had neither claws nor teeth for defence, and could not fly, nor could he run very fast. The great beasts, reptiles and birds of prey, in those far-off days were his physical masters, and it is a wonder that he ever survived. His abode was either in trees or caves and neither was safe from intrusion; further, his subsistence was very precarious. He was in constant terror all of the time, and a form of this fear is instinctive in all of our minds to this very day. It is true that at that time he was nearly, if not quite, an animal himself; but his experiences have left their mark upon our minds. When he learned to throw stones and use clubs he made a little progress towards survival.

Not only did he have the beasts of prey to contend with, but he also had to defend himself from his fellow savages. The strongest killed the weakest and appropriated all of his belongings.

As time went on, men formed in clans and tribes for mutual protection. The upheavals of mountain ranges and gradual cooling of the earth's surface caused great climatic changes, which resulted in the extinction of some of the larger and fiercer beasts and birds of prey, and man began to have an ascendancy over the remaining animals. Mankind then began to multiply, but they still had the fear of death in some violent form, from either animals, or their fellows in numerous tribal wars.

As civilization advanced this fear became somewhat lessened, and the fear of death from starvation became more prominent. If he was thrust out of the tribe, death was sure, from either starvation or violence, so he became afraid of other men. In patriarchal times men were more or less slaves, and lived by the favor of the master, and feared its withdrawal. This debasing fear of man and the fear of starvation is our inheritance from those far-off times.

Fear is paralyzing, and it more or less prevents our best efforts and full development. If we were without fear we would be more likely to courageously attack the biggest problem with our heads up and chins in the air, facing the world squarely.

But we are held back by fear. If we labor for others, as most of us do, we hesitate to take a chance, because a failure may mean being thrown out of employment, and thus through fear we become craven in a more or less degree. Worry, too, takes something out of us, and we are handicapped by it to a large extent.

What is the remedy to-day for fear and worry? Simply money; a Reserve Fund, such as a wise business man provides to carry him over bad times. You are a business man, too, for while he sells commodities, you sell skill. So *get a reserve.* It is to be had by denying yourself the things not absolutely necessary to procure for you happiness and comfort. If you are the head of a family, it is true that it is hard to deny others some of their foolish desires, but it is your duty as the provider and head of the family to do so, until you have a reasonable reserve. It is a mistaken kindness not to refuse. A man with a reserve against sickness or lack of employment, even though small, has little fear; he is more cheerful, and because he is so, he is more apt to be given better employment, and socially sought out. His work is better, and he is more likely to be advanced in position, because the employer realizes that a man who can manage his own affairs well, can help to manage his. Is it not then worth while to get rid of *fear?*

National Breweries

Company Changes Fiscal Year to Correspond with Calendar Year and Shows Large Profit

Trading profits of National Breweries Limited for fourteen months ended December 31, 1919, amounted to $1,061,350, compared with profits of $616,265 for the twelve months ended October 31, 1918. After providing for depreciation, interest on bonds and dividends, the balance at credit of profit and loss was increased from $900,592 to $1,379,938. The company's active assets show an increase from $2,462,652 to $2,681,369, while property assets are up from $4,268,982 to $4,569,834.

Ames, Holden, McCready

Eight-month Report Makes Good Showing Compared With Previous Fiscal Year

Owing to a change in the fiscal year, the report of Ames, Holden, McCready, Limited, recently issued, covers eight months only, this being from May 1 to December 31. Net profits, after all deductions except preferred dividends, amounted to $307,400, as compared with $323,322 for the full 1918-19 period. It is pointed out that the four months excluded are those when business is at its height, so that the showing was even better than was indicated. Total sales were $4,269.368, being an increase of $1,022,642 over those in the corresponding period of the previous year. Prospects for 1920 were promising.

Nova Scotia Steel

Profits for 1919 Were Affected by Decreased Output and Lower Prices Prevailing

Combined profits of all departments of the Nova Scotia Steel & Coal Company, Limited, for 1919, were $2,193,304, as compared with $3,535,525 in 1918. The volume of business was smaller than for several years, being $6,889,941, as compared with $11,525,779 in 1918 and $12,359,113 in 1917. Net profits were $1,029,876, against $1,716,492 in 1918. The balance available for distribution on the common stock was $859,876, or at the rate of 6.39 per cent. The report states that during the depression, in order to furnish employment and hold the organization together, a considerable amount of business was taken below cost. The demand for steel improved towards the end of the year and at the date of the report the tonnage of unfilled orders was larger than at any time since the signing of the armistice.

Canadian General Electric

Profits for 1919 Showed Reduction, but Business at End of Year was in Large Volume

Total profits of the Canadian General Electric Co. for 1919 amounted to $1,617,989, with net profits of $1,093,320, the latter comparing with $1,436,483 in 1918. Dividends of $780,000 were paid. Adding the undivided profits from the previous year of $522,776 and then deducting $400,000 transferred to reserve, there remained at credit of profit and loss $436,097, which with the reserve of $5,000,000, left a surplus of $5,436,097.

The report refers to the depression which was felt in the first half of the year and to the great improvement in the last half of the year, when sales exceeded those of any previous period in the history of the company. It forecasts a continu-

EXPORT TRADE

Manufacturers contemplating the extension of trade in foreign countries are offered the assistance which this Bank's world-wide business connection makes possible.

The experience and facilities of a department of the Bank devoted wholly to foreign business are at your command.

THE CANADIAN BANK OF COMMERCE

PAID-UP CAPITAL - - - $15,000,000
RESERVE FUND - - - $15,000,000

55A

The Merchants Bank of Canada

Head Office, MONTREAL **Established 1864**

Capital Paid-up	$ 7,000,000
Reserve Funds	7,574,043
Total Deposits (Nov. 30, 1919)	167,000,000
Total Assets (Nov. 30, 1919)	200,000,000

President: Sir H. Montagu Allan, C.V.O
Vice-President: K. W. Blackwell
General Manager: D. C. Macarow
Supt. of Branches and Chief Inspector: T. E. Merrett

Merchants and Manufacturers

are cordially invited to discuss all matters of finance with us.

The Merchants Bank is more than a mere depository—it is an Institution that stands ever ready to advise and assist its customers in regard to money matters, investments and business generally.

365 Branches in Canada Extending from the Atlantic to the Pacific, of which 138 are in Ontario, 44 in Quebec and 180 in Western Canada

NEW YORK AGENCY, 63-65 WALL ST.



Earnscliffe Linen Bond

For Business Stationery

White and Eight Tints

The Earnscliffe Linen Bond sample book illustrated above shows specimens of this very fine Canadian-made Paper—with some attractive letterheadings. You should have one. Let us send it.

Made in White and Eight Contrasting Colors

THE ROLLAND PAPER COMPANY LIMITED MONTREAL

The "R SHIELD" Watermark *guarantees "ROLLAND QUALITY"*

CHARLES F. DAWSON, LIMITED

Wholesale and Manufacturing Stationers

MONTREAL

Bookbinding **Printing** **Ruling**
Embossing **Engraving** **Lithographing**

Manufacturers in every branch of the industry
Carry a large stock of every office requisite

WE OFFER

Accurate, intelligent attention
Prompt careful deliveries
Cumulative experience of ninety years
Fair prices
Satisfaction

On account of the service offered, we number among our friends most of the Governments, Federal and Provincial—Municipalities, Banks, Transportation Companies, Corporations, Professional Firms, Colleges, Schools, etc.

If you have not already done so—why not open a ledger account with us. You will be surprised at the change.

P.S.—Catalogues and advertising literature yours for the asking.

ance of profitable business, basing this belief on the great prospective development of the electrical industry. Reference is then made to the extensions and additions to manufacturing and distributing facilities at present being proceeded with.

Dominion Canners

Higher Profits Recorded as a Result of Greatly Increased Sales

Profits of Dominion Canners, Limited, for 1919, before deducting bond interest, but after providing for Business Profits War Tax, amounted to $819,823, as compared with $745,324 in 1918. After paying bond interest and preferred dividends, the sum of $559,683 was added to profit and loss, bringing the undivided balance in this account up to $2,031,905. The directors decided against paying a dividend on common, although earnings on common amounted to over 18 per cent. It was felt that the money was needed for the company's operations.

Riordan Pulp

Substantial Increase in the Earnings of the Riordan Pulp and Paper Co., Limited, in 1919

Gross earnings of the Riordon Pulp & Paper Co., Limited, in 1919 amounted to $1,810,126, an increase of $367,080 over 1918. After all charges were met, the balance available for application to the common stock was $851,088, equivalent to 18.91 per cent., this comparing with $816,563, or 18.14 per cent. in 1918. The regular common dividend disbursement of $450,000 was paid, leaving a balance of $401,088 to be added to surplus account, bringing this up to $2,591,796. Announcement is made that the common capitalization will be increased to $6,000,000.

Dominion Foundries

Earnings for the Past Year were in a Considerably Lower Scale than in 1918

At the annual meeting of the Dominion Foundries & Steel, Limited, held in Hamilton on March 10, earnings for 1919 of $654,000 were reported, comparing with $1,228,614, unofficially reported a year ago. After deducting preferred dividends, $596,400 remained, equal to 24 per cent. on the common stock. The company have $712,000 in cash, a plant valued at $2,000,000 and $651,000 in its investment fund. There is no bonded indebtedness. A large new plate mill is under contruction.

B. C. Fishing

Small Gain for the Year in Surplus of the B. C. Packing and Fishing Co.

While details of the profit and loss account are not given in the annual report of the British Columbia Packing and Fishing Company, it is shown that the surplus has increased from $1,439,694 to $1,465,802, with reserve up from $726,257 to $751,614. Dividends to the amount of $234,081 were paid and on August 21 last the dividend rate was increased from 5 per cent. to 6 per cent.

Among the total assets are included real estate, buildings, canneries, etc., less depreciation, to the value of $2,462,648.97, as against $2,610,539 last year. Insurance fund and other investments are given as $265,400. Shares in and advances to other companies are $369,172. These two items compare with a total of investments in last year's report of $580,251.78, which shows an increase of $54,320.43 Inven-

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Constantly enlarging our sphere of influence that we may extend to you ---our customers---the fullest possible banking accommodations, we have made notable additions to our branch bank system in Canada during this year.

We have more than 400 branches and continue to grow.

ASSETS EXCEED $174,000,000

Union Bank of Canada

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THE ROYAL BANK OF CANADA

Capital Paid Up	$17,000,000
Reserve and Undivided Profits	18,000,000
Total Assets Over	500,000,000

HEAD OFFICE - MONTREAL

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W. J. Sheppard	Capt. Wm. Robinson
C. S. Wilcox	A. McTavish Campbell
A. E. Dyment	Robert Adair
C. E. Neill	T. Sherman Rogers, K.C.

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E. L. Pease, Man. Director; C. E. Neill, Gen. Manager
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Riordon Pulp & Paper Company Limited
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BLEACHED SULPHITE
MADE IN CANADA

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SULPHITE FIBRE WOOD PULP

BLEACHED AND UNBLEACHED

FOR PAPER MILLS

IMPERVIOUS SPRUCE SHEATHING

LUMBER

SPRUCE, HEMLOCK AND PINE, CEDAR RAILWAY TIES AND SHINGLES, SPRUCE CLAPBOARDS

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uubscriptions are based on the service furnished, and are available only by re-Sptable wholesale, jobbing and manufacturing concerns, and by responsible and worthy financial, fiduciary, and business corporations. Specific terms may be obtained by addressing the Company at any of its offices. Correspondence invited.

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Montreal, Que.	Toronto, Ont.	Vancouver, B.C.	
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Catalogue B.

The Goderich Organ Co. Limited
GODERICH, CANADA

Closet Seats, Flush Tanks, Medicine Cabinets,

Everything for the Bathroom.

Write for Catalogue C and Price List.

tories of stores, nets and supplies total $628,330, and fish canned and in cold storage are valued at $386,050, which make a total under this head of $1,014,381, which is slightly under the total for the same items last year, which was $1,035,553. Accounts and bills receivable (less provision for doubtful accounts), are $189,961, which compares with $421,264 in 1918.

This item last year makes special mention in itemizing of sundry debtors, including fishermen's accounts Cash on hand and in bank this year was $223,962, which is somewhat of an increase over the same item last year, which amounted to $6,116.

Brandram-Henderson

Increased Earnings and Record Sales Reported by This Company for the Past Year

Net profits of Brandram-Henderson, Limited, for 1919, amounted to $299,736, which compares with $238,133 for the thirteen months ended December 13, 1918. After meeting all charges, including depreciation, dividends and war tax, the balance at the credit of profit and loss was increased from $501,519 to $639,027. The balance sheet shows total current assets of $1,610,703, as against current liabilities of $339,410.

Regarding general trade conditions, George Henderson, the President, reports: "During the early months of the year foreign sales were disappointing, but by the end of the year export shipments and booked orders represented a bigger percentage of total than ever before. This was in no way attributable to any decrease in home trade, because each Canadian division reports a half-yearly increase, and also an increase for the year."

Canadian Salt Co.

Profits for 1919 were on Practically the Same Scale as in Previous Year

Operating profits of the Canadian Salt Co., Limited, for the year 1919 were $226,881, as compared with $223,342 in 1918. Net profits amounted to $136,286, or almost exactly the same figure as the previous year. A balance of $72,286 was added to surplus, which now stands at $595,858. Mr. E. G. Henderson, president of the company, in the directors' report, states that great difficulty was experienced during the year in obtaining a requisite supply of fuel, owing to strikes and embargoes in the United States, and in addition at times the supply of hydro power was greatly curtailed, which prevented the plants being operated at full capacity.

Howard Smith Paper Mills

Big Gain Recorded in Net Profits and Working Capital Position During Past Year

Net profits of Howard Smith Paper Mills, Limited, for 1919 amounted to $429,228, compared with $252,604 in 1918 and $200,546 in 1917. After other revenue is added, total income for the period amounted to $437,990, which compares with $257,241 in the previous year. Deducting bond interest and preferred dividends, a balance of $369,524 remained, which represented earnings of 34.8 per cent. on the common. A generous amount was allowed for depreciation, and $181,552 was carried to general reserve, bringing it up to $643,793.

Provincial Paper Mills Co.
Limited

PAPER FOR CATALOGUES

Mills at

Thorold, Georgetown and Mille Roches, Ontario

HEAD OFFICE - TORONTO, CANADA



Banishes Work-day Weariness by Saving Countless Futile Steps

MODERN business demands that the costly wastefulness of mis-directed efforts—the work-day weariness of futile steps be saved. As the craftsman with the better tools is always the better workman, so the office man or woman with the better tools can be depended upon for more work and better work.

The OFFICE SPECIALTY Record Desk banishes the countless futile steps required to run to and from the ordinary filing cabinet. It enables the worker to concentrate her mind on the work to be done. With the Record Desk, one clerk can do more work than two working under old fashioned conditions. It helps greatly to eliminate errors and thus improves the quality, as well as increases the volume of work accomplished.

The Record Desk is compact and occupies but little floor space. It is sectional and can be arranged to accommodate any record card file, large or small. It places thousands of card records within arm's reach and combines every advantage of the serviceable desk with those of the ordinary record filing cabinet with every step in between saved.

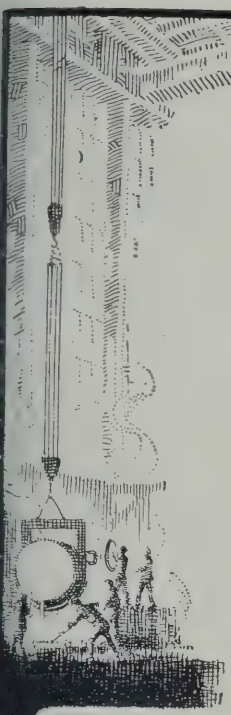
There is no other desk like the OFFICE SPECIALTY Record Desk, because it is the only one into the building and designing of which go more than thirty years of experience in designing and building office equipment for Canada's more important firms.

This is the age—the day—the *hour* of service. Success is assured only to those firms and individuals who can deliver service. Competition demands speed and accuracy. Good judgment dictates that wasted energy which so makes our work day wearisome, be banished and tasks made easier. The OFFICE SPECIALTY Record Desk will accomplish both in every office where a record filing system is used. Especially desirable in purchasing departments, advertising departments, warehouses, store rooms, and all similar branches of business in which careful and accurate filing and quick availability of the larger card records are a necessity.

System Service goes with all OFFICE SPECIALTY equipment. It does not end with the completion of the sale but, is given free with perfect willingness to all who need it as long as desired. If you have Office System problems to solve, OFFICE SPECIALTY System Service Experts, men schooled and experienced in systematizing and the organization of office routine are at your call. A card or phone message will receive prompt attention.

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The explanation of the remarkable success of many of our leading industries may be stated in a phrase—Scientific Control in Manufacturing.

Each step in every process, every method, every practice, has been subjected to the closest scrutiny with a view to securing an increasing degree of accuracy in control.

Gradually there has been evolved a plan of operation that has completely eliminated everything unnecessary or wasteful, speeding up production and cutting down costs.

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Let us make a survey of your plant and give you confidential suggestions calculated to increase its efficiency—and your profits



MILTON HERSEY COMPANY, LIMITED

Industrial Chemists, Engineers and Inspectors
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Factories Damaged by Lightning

Tall chimneys and high structures are particularly susceptible to damage by lightning. Not all the damage comes from direct flash. When a stroke occurs all the metal parts, such as steel beams, pipes, electric wiring, roof gutters, etc., are ***charged*** by "Induction," frequently producing sparks which cause fire. Last year the insurance companies paid $1,500,000.00 in Canada for damage by lightning. All risk of fire or damage by lightning can be eliminated and 100% protection ***guaranteed*** by installation of

Shinn-Flat
System of Lightning Prevention

This system embodies the scientific principles discovered by Prof. Day in his 16 years' research work, both in regard to the kind of "rod" that is safest, and the kind of "installation" that will make a stroke of lightning harmless. It requires as much expert and scientific accuracy to "rod" a building correctly, every building being different, as it did to discover the most efficient kind of lightning rod. The Shinn-Flat Lightning Rod of copper wires woven into a flat ribbon is the last word in Scientific Lightning Protection. Ask Shinn Mfg. Co. about protecting your chimneys and factories.

Agents Wanted—It is a profitable business to be agent for the Shinn-Flat System of Lightning Prevention. Dealers or responsible individuals who wish to represent our line please write for particulars and terms.

Write for full information, Prof. W. H. Day's Book "Lightning, Cause and Control." Mailed on request.

Shinn Mfg. Co. of Canada Limited, 126 Woolwich St., Guelph, Ont.
PROF. W. H. DAY, Manager

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Canada's Industrial Expansion

A Record of Progress

Secure Canadian Plant

The Republic Stamping & Enameling Co., Canton, Ohio, Take Over a Toronto Industry

The Republic Stamping & Enameling Co., Canton, Ohio, manufacturers of "Old English" grey enameled ware, have purchased the entire stock issue of the Consolidated Stamping & Enameling Co., of Toronto, and will form the Republic Stamping & Enameling Co. of Canada, Limited, to operate the Canadian industry, at 2382 Dundas Street, Toronto. Decision as to the enlargement of the plant will be made by the directors, and an early announcement of the company's policies will shortly be forthcoming.

To Make Auto Tops

General Top Co., of Canada, Limited, Take Over Aeroplane Plant at Toronto

The General Top Company of Canada, Limited, have been incorporated to manufacture a new type of automobile top, known as the Artcraft Top. It possesses certain special and exclusive features which make it a desirable article. The company have taken over part of the old Curtiss Co.'s plant at 163 Dufferin St., Toronto, and started producing about the first of the month. When operating at full capacity, they expect to employ from 125 to 150 hands.

The officers of the company are: President, R. C. Kilgour, President Packard-Ontario Motor Car Co.; Vice-President and General Manager, Lawrence W. Lee, formerly Asst. Supt. of the Ford Motor Car Co.; Secretary, W. L. Cowan, Treasurer Ontario Motor Car Co.; Directors—E. G. Baker, Secretary F. N. Burt Co.; C. R. Norton, President General Top Co., Cleveland; H. S. Norton; E. A. Petriquin, Cleveland, and H. P. Macintosh, Jr., Cleveland.

New Product for Canada

Diamond State Fibre Co. of Canada, Limited, to Make Vulcanized Fibre and Its Products

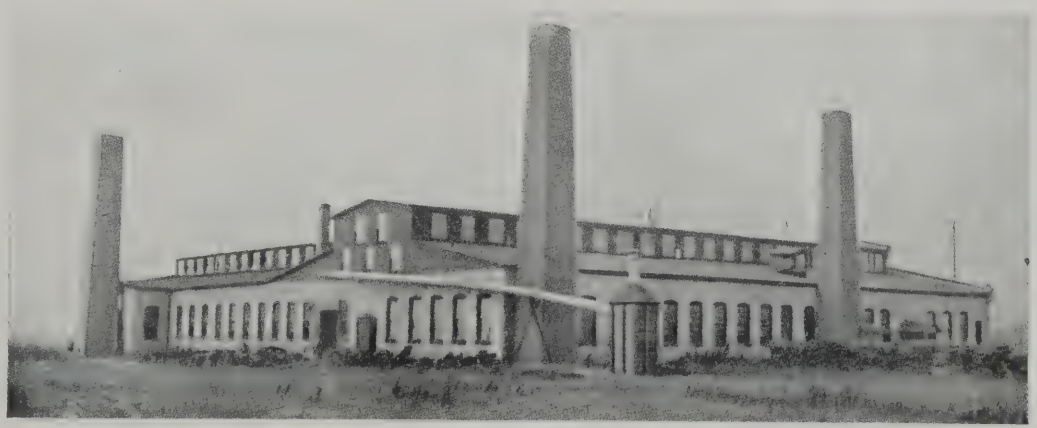
The recent incorporation of the Diamond State Fibre Co. of Canada, Limited, is a matter of considerable interest to Canadian industry. The company will make vulcanized fibre and its products, under the name of "Diamond Fibre." This substance has a varied use in the electrical and mechanical fields. In the former it is used for insulating bushings, gaskets, washers, wire conduits, handles, track insulation, etc.; in the latter for noiseless gears, discs, wheels, timer rings, frictions, bearings, etc. It is also extensively used in the manufacture of trunks, suit cases, trucks, barrels, baskets, boxes, etc.

For the present the Canadian company will not manufacture the raw material, but will import from the Maidstone, England, or Bridgeport, Penn., mills of the Diamond State Fibre Co., the raw material, and machine the finished products in Canada, the company's plant in Toronto being fully equipped for the fabrication of fibre specialties. It is understood that



Has Proved Too Small

The No. 2 Plant of the Smith's Falls Malleable Castings Co., Limited, capacity of which has not been adequate to handle business offering



Again in Operation

The No. 1 Plant of the Smith's Falls Malleable Castings Co., Limited, which was closed down for several years and has again been requisitioned

just as soon as the demand warrants, a mill for the manufacture of the raw materials will be erected in Canada.

The Diamond State Fibre Co. are the world's largest manufacturers of vulcanized fibre. They have mills and factories at Maidstone and London, England, and at Bridgeport, Pa., West Consihohocken, Pa., Elsmere, Del., Boston, Mass., and Chicago, Ill. The Canadian company are now prepared, under the management of Mr. T. Ellwood Webster, to give the best service to the Canadian market. Hitherto it has been necessary for the Canadian buyer to import from the United States, which involved delay in putting shipments through the customs and securing delivery. With the establishment of the Canadian company, this difficulty will be eliminated.

New Cement Enterprise

Ontario Cement Co., Limited, will Build Plant at Beachville, near Woodstock

The Ontario Cement Co., Limited, who have acquired the physical assets of the late Ontario Portland Cement, Limited, whose plant was located at Blue Lake, are proceeding with the erection of an 800-barrel mill at Beachville, midway between Woodstock and Ingersoll. Here are located valuable deposits of clay and limestone, sufficient to supply a 1,500-barrel mill for fifty years at least, while the property is admirably located for transportation and power.

Directors of Ontario Cement Co., Limited, include D. L. Adams, Adams Wagon Co., Limited, Brantford; E. P. Watson, Watson Manufacturing Co., Limited, Brantford; K. W. Harvey, Harvey Knitting Co., Limited, Woodstock, and George McCrae, formerly with the Ontario Portland Cement Co.

The company's prospectus states that building operations will be commenced as soon as weather permits, and it is confidently expected to have the plant in operation by August 1. In the meantime, the company intends to reopen the Blue Lake plant in order to take advantage of the present demand for cement, and material will be drawn from the Beachville property.

Building Large Addition

Parisian Corset Mfg. Co., Limited, Quebec, to Have 21,700 feet More Floor Space

An addition 70x62 feet, five storeys, and containing 21,700 square feet of floor space, is being erected by the Parisian Corset Manufacturing Co., Limited, Quebec, and will be ready for occupancy about May 1. With this expansion adjoining the main building northward, the floor area will be about 70,000 square feet. The building will extend from Colomb Street to St. Valier Street, and the offices will be removed to the latter street. A lunch room will be provided for the employees on the fourth floor, where coffee or tea will be served gratuitously by the company.

New Milk Factory

Bowes Milk Products, Limited, Are Erecting New Powdered Milk Plant at Sydenham

A building of brick construction, 96x196 feet, capable of enlargement, is being erected by Bowes Milk Products, Limited, at Sydenham, Ont., for the manufacture of dry or powdered milk. With equipment, the plant will cost from $150,000 to $200,000, and it will be ready about the middle of May. It is located on the Canadian National Railways, immediately opposite the Sydenham depot, and will have its own siding. Reports indicate a milk supply of 150,000 to 200,000 pounds per day within a radius of twelve miles.

A Full Measure *of* Fire Protection

is furnished your plant by means of



Eddy's

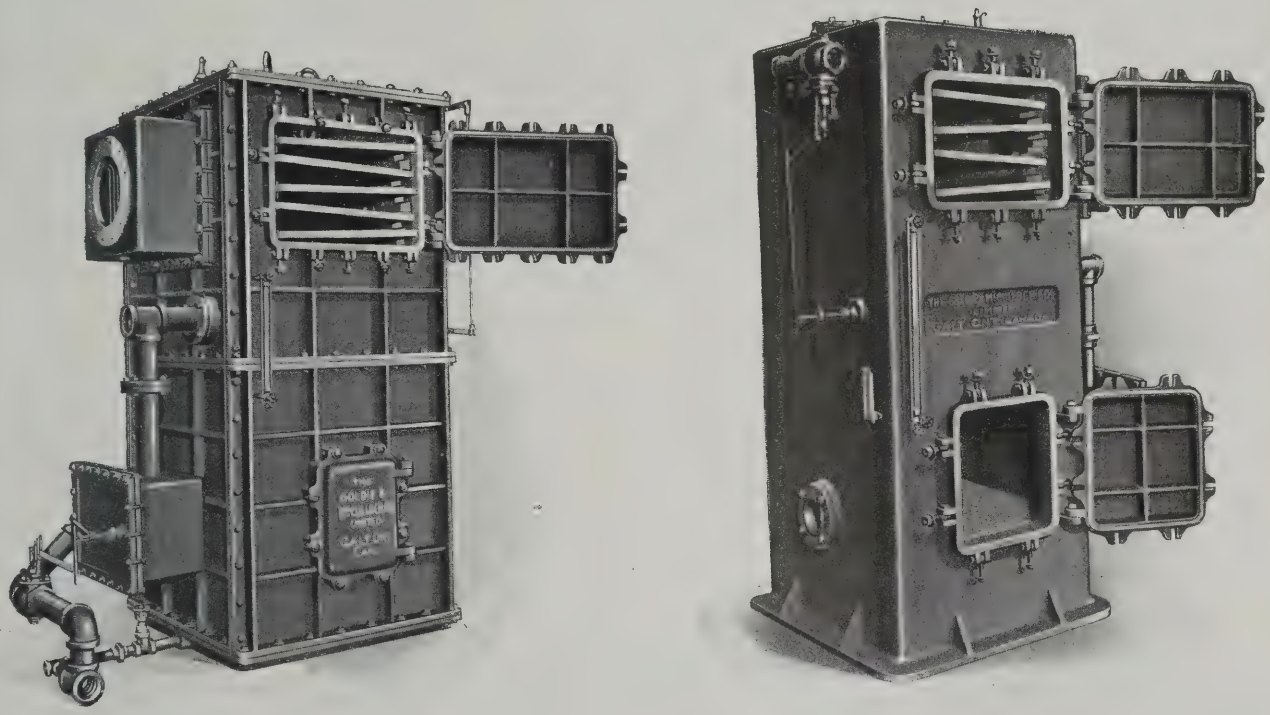
Indurated Fibreware Fire Pails

Made of Indurated Fibreware and moulded all in one piece these light leak-proof fire pails are practically everlasting. And they are always there when the call comes. Every pail has a rounded bottom that necessitates its being placed on its rack or hook.

Any hardware dealer will be glad to show you the Eddy Fire Pail

The E. B. Eddy Co., Ltd. Hull, Canada

HIGH EFFICIENCY
POWER EQUIPMENT
LAND AND MARINE



Our Sectional and Solid Types Cast Iron Open Feed Water Heaters
Built in sizes up to 5000 Horse Power

The Heater that will effectively extract oil and grease from the exhaust steam and deliver the feed water at nearly boiling temperature, at the same time removing any scale forming matter that can be precipitated at this temperature

WE BUILD

STEAM ENGINES, STEAM TURBINES, RETURN TUBULAR AND WATER TUBE BOILERS, PUMPS, HEATERS, CONDENSERS, ETC.
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BRITISH COLUMBIA AGENTS: Robt. Hamilton & Co. Vancouver, B.C.

QUEBEC AGENTS: Ross & Greig 400 St. James St., Montreal, Que.

The company contemplate drying an average throughout the year of 50,000 pounds per day, and this will be exceeded in the flush season.

The Sydenham plant is the second plant of Bowes Milk Products, Limited, they already operate a factory at Bloomfield, Ont. Here the process building is 40x140 feet, two storeys, with storage warehouse on siding 200x40 feet, also two storeys. The capacity is 50,000 pounds per day.

To Double Capacity

J. Ford & Co. are Making Improvements to Their No. 2 Paper Mill at Portneuf Station

Considerable additions are being made at present to the No. 2 mill of J. Ford & Co., manufacturers of hard sized news lining, hanging, colored poster, wrapping and bag papers, Portneuf Station, Que. These consist of a new reinforced concrete, fireproof building, 200 x 80 feet, two stories, with an extension for boiler room. It is intended to move the 120-inch Fourdrinier machine from the old to the new building, and a second machine is on order, though it will be some time before it is delivered. Capacity will then be doubled.

Have Taken Over Plant

Independent Concrete Pipe Co., Limited, Formed to Operate Woodstock Industry

The Independent Concrete Pipe Co., Limited, have taken over the plant in Woodstock of the B. Blair Co., Mr. Blair becoming president and manager of the new company. John E. Russel Co., Toronto, are general sales agents. The company will continue to turn out a full line of concrete pipe, in sizes from 6 to 108 inches in diameter, and the plant has been considerably enlarged and improved. They have also secured the right to manufacture lock-joint pipe in Ontario. Later on the company may see fit to manufacture other concrete products. Capitalization is $200,000.

New Shoe Industry

Owen-Elmes, Limited, Toronto, Are Going in for the Manufacture of Pumps and Slippers

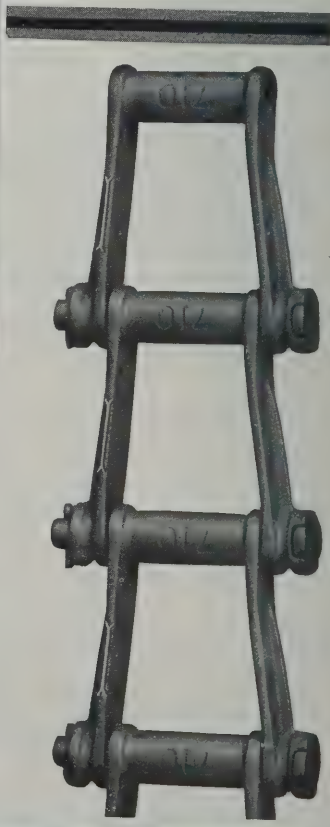
It is announced by Owen-Elmes Limited, Toronto, that they will undertake the manufacture in Canada of hand-turned pumps and slippers, lines not hitherto made in this country. They have not yet made final arrangements but, as the industry will not require any great floor space or much heavy machinery, the question of building accommodation is a minor consideration. Full details of the new undertaking will be available later.

Established in Cornwall

Canadian Linoleum & Oilcloths Limited, are Getting Plant in Readiness for Early Operation

Canadian Linoleums & Oilcloths, Limited, who were recently incorporated with a capital of one million dollars, have purchased a site in Cornwall, on which is erected a new solid brick and stone building, 45 x 112 feet, four storeys and a half in height. Work has commenced on alterations and additions to this building, and machinery has been secured and will be installed shortly. While it is impossible to state definitely when manufacturing will commence, it is hoped that some lines, at least, can be produced within the next two or three months. A loan of $40,000 is being





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can cut down the cost of handling your product and release your labor for more profitable work. No matter what your product may be, it will pay you to submit your problem to our experienced engineers for solution. We have helped many.

Tell us how you handle your raw or finished product, the number of men required in moving it, together with a rough pencil sketch of your plant lay-out. We may suggest a plan for doing the same work mechanically with a saving of time, labor and money

CANADIAN LINK-BELT CO., LIMITED

WELLINGTON and PETER STREETS - TORONTO



DAYLO—a safe-guard of industry

—where the smallest crack or flaw, overlooked, would mean disaster

—down in the cellar of the sky-scraper

—in the murky gloom of a ship's stoke-hold

—in the boiler room of the industrial plant

—wherever the safety of lives and property depends upon thorough and accurate inspection

—*there a DAYLO is needed*

There are a dozen places in your plant where a DAYLO is needed to make sight clearer.

And there are a hundred other places where a DAYLO can quicken production, reduce break-down delays, prevent minor accidents, and help improve quality of the work.

One for every purpose

A few of the Daylo types suitable for industrial use are shown here—there are many more to fit the varied needs for quick, sure and strong light throughout the plant.

All leading hardware, electrical, drug, sporting goods and auto accessory dealers can show them to you.

CANADIAN NATIONAL CARBON COMPANY
Limited
Toronto - Canada

A. 1114



made to the company by the town of Cornwall, and exemption from municipal taxes has been allowed.

R. E. Kingsley, managing director of the company, was until recently comptroller of the Dominion Oil Cloth Co., Limited. He spent fifteen years with the latter company, and prior to that was engaged in the cotton trade both in Canada and in the United States.

New Company Formed

Bourget & Guy, Cigar Manufacturers, Montreal, Are Succeeded by Prince Rupert Co., Limited

The Prince Rupert Co., Limited, incorporated with a capital of $75,000 under a Dominion charter, have succeeded Messrs. Bourget & Guy, cigar manufacturers, Montreal. They have recently established a second plant at Quebec. They are making high grade Havana cigars, such as "Prince Rupert," and also have a contract from S. Davis & Sons, Limited, for grades such as Davis Noblemen, Panetelas, Couchas, Maurice, Souchez, and Gene Vall, etc. They employ over 60 hands in Quebec and more than 100 in Montreal.

Making Large Expansion

International Metal Works, Limited, Brockville, Have Big Building Programme Under Way

Considerable additions are being made to the plant of the International Metal Works, Limited, Brockville. An additional storey, giving approximately 8,000 square feet more floor space, is being put on the main building. A two-storey addition, containing 3,500 square feet, will then be made. These additions are for the purpose of carrying on regular auto sheet metal parts production, which has increased in volume approximately 50 per cent. over the previous year. Besides this, the company have started the manufacture of automobile bodies, and for this have leased a portion of the National Manufacturing Co.'s building, occupying three floors of fairly large dimensions.

25 Per Cent More Output

De Long Hook and Eye Co., of Canada, Limited, Will Enlarge Their Plant

The De Long Hook and Eye Co. of Canada, Limited, St. Mary's, are proposing to add another storey to their present factory or, as an alternative, build a warehouse. They are also re-arranging their present factory to enable them to increase their output by at least 25 per cent. These arrangements, they state, are merely temporary, to enable them to cope with increasing business during the present year. Beyond that they have not decided what move or further addition to make.

Building Large Addition

The Perfect-Knit Mills, Limited, Listowel, Are Putting Up a New Four-Storey Mill

Work was started recently by the Perfect-Knit Mills, Limited, Listowel, on the erection of a new knitting mill. This will be 50 x 250 feet, four storeys with basement and attic. During the five years the company have been in business, they have not been able to take care of orders, and are now planning this extension in order to meet further business. They hope that the addition will largely increase output. It will be completed in the summer.

Will Make Parts in Canada

Burroughs Adding Machine of Canada, Limited, Windsor, Plan Important Extensions

The Burroughs Adding Machine of Canada, Limited, have at present under construction at McDougall and Anne Streets, Windsor, a reinforced concrete building containing

The Canadian Appraisal Company

Limited

FULL consideration must be given to the present conditions of high costs if adequate insurance is to be provided, an adverse operation of the Co-insurance Clause is to be avoided, and a satisfactory adjustment is to be assured in the event of fire.

Buildings erected only a few years ago may very possibly be worth double their original cost to-day. *This increased value is insurable and must be insured.* A bitter experience awaits the manufacturer who has not considered the necessity and who may have to rebuild after a fire.

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One in every corner. One or more in every hallway. One on every stair.

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Hose reels everywhere. Standpipes and hydrants galore.

"Perfect fire protection."

Yet buildings equipped with all of these humanly operated fire extinguishing devices burn every day in the year.

Why?

Because every one of these perfect fire fighting appliances needs a man behind it or it won't work.

That's why non-automatic fire apparatus so often fails.

That's why Grinnell Automatic Sprinklers are better fire-stoppers than the most efficient manual apparatus.

Long before the man-worked fire appliance can get to the heart of the fire, the little Grinnell Sentinel has put an end to threatened ruin, trouble and loss. When the fire starts, the water starts. Not a second is lost in getting ready or "getting there."

That's why the insurance rate on Grinnell protected buildings is so much less than on unprotected ones, that it soon pays for the entire equipment. Your insurance man will tell you just how much the saving will be on your own building.

Important

Heretofore the underwriters have often required a tank supply for automatic sprinklers in addition to the city mains. Now, however, Grinnell Sprinkler equipments can often be installed without a tank.

Don't "think it over" without the facts to guide you. Write us for actual figures to-day.

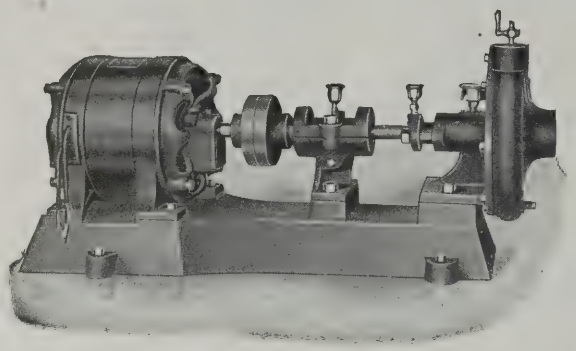
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MONTREAL, QUE.—370 Beaumont Ave.
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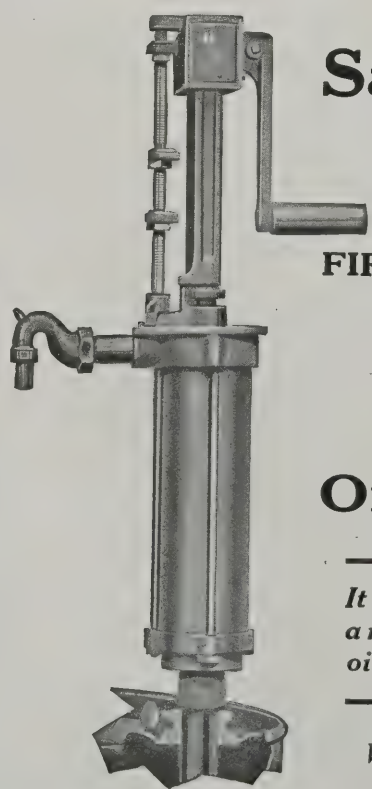
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MINIMIZE FIRE HAZARD
by installing our
Hand Oil Pump

It stops the drips and consequent oil-soaked floor.

Write for Bulletin

Hamilton Motor Works, Limited
HAMILTON, CANADA

approximately 55,000 square feet. It is two storeys high, but is being built for future extension to five storeys, and should be ready not later than July. Hitherto the Burroughs Company have merely assembled machines in Canada from parts made in the United States. They expect now, however, to undertake the manufacture here of certain parts, and will ultimately extend the scope of this activity. With their new plant, they will be able to double output. The demand for their machines from foreign countries is reported to be increasing rapidly.

Will Make Juniper Oil

Quinte Chemical Co., Deseronto, Has Plant Nearly Ready for Operation

The Quinte Chemical Co., Limited, who were incorporated Feb. 19, 1919, with capital of $40,000, have their plant located near Deseronto, nearly 90 per cent. complete and, if sufficient capital is available, expect to begin operations early this spring. The company propose to distill juniper oil from the juniper bush and berry and cedar oil from the cedar bush and their plant has an initial capacity of a ton of bush per day, which can be increased to another ton per day by adding another still. They have eleven acres of ground and the plant is over 100 feet long by 30 feet wide, with other buildings for laboratory, shop, office, etc. The plant's capacity is at least 40 pounds per day. Col. W. J. Malley is president and treasurer and George F. Palmer, Secretary.

New Powder Industry

The Thompson Powder Co., Limited, Deseronto, Expect to Start Operations in About a Month

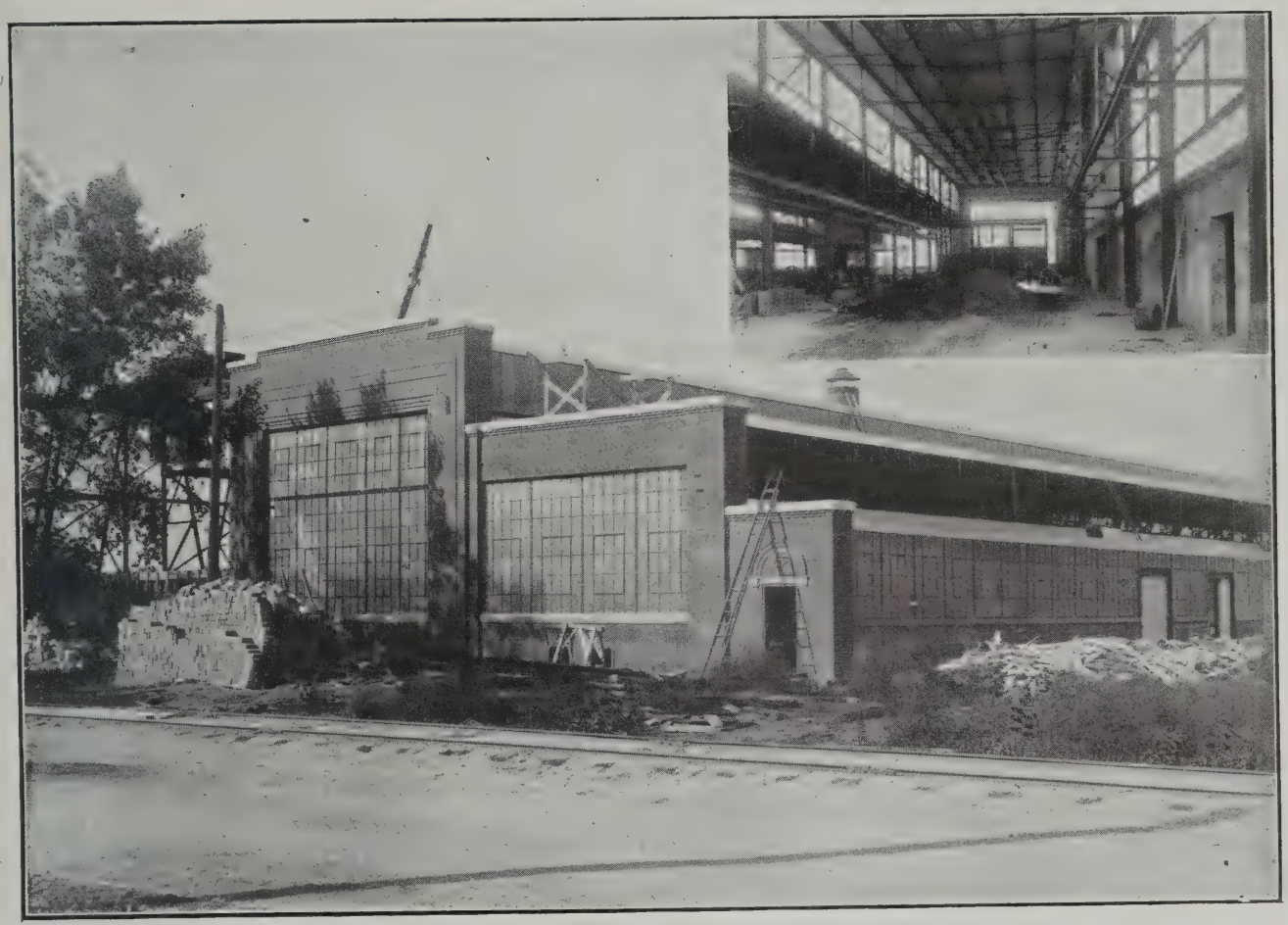
The Thompson Powder Co., Limited, have recently secured incorporation for the purpose of manufacturing and selling explosives. They have taken over some existing buildings in Deseronto, and are making necessary additions and equipping plant, which they expect to have operating some time next month. The company's prospectus explains that they will manufacture a new high explosive, called "Thompsonite," which not only does not throw off noxious fumes, but does not require thawing even in the coldest weather. It has also several other qualities which, it is claimed, will commend its use to mining men and contractors. J. D. Thompson is president and general manager; H. C. Anderson, vice-president, and J. A. Griffith, secretary-treasurer.

Plant for New Toronto

Lion Tire & Rubber Co., Limited, Propose to Erect Large Tire Factory at this Point

The Lion Tire & Rubber Co., Limited, have recently been organized for the purpose of establishing a factory in New Toronto for the manufacture of a high grade line of motor vehicle tires and tubes. A site has been secured on the Hamilton Highway, consisting of a fraction over five acres and the first unit of their contemplated plant will consist of a building 100 x 300 feet, two storeys, with an estimated capacity of 500 tires and 1000 tubes per day. A large part of the factory will be equipped for the manufacture of cord tires. Foundations will be strong enough for the addition of two extra

FOR SALE 1 Fairbanks-Morse 5-Ton Platform Scale
in first class condition. Price, f.o.b. cars Hamilton, $100.
An opportunity to get a first class scale at a remarkably low price.
Dominion Sheet Metal Corporation, Ltd.
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Those with the most cheek do the least blushing.

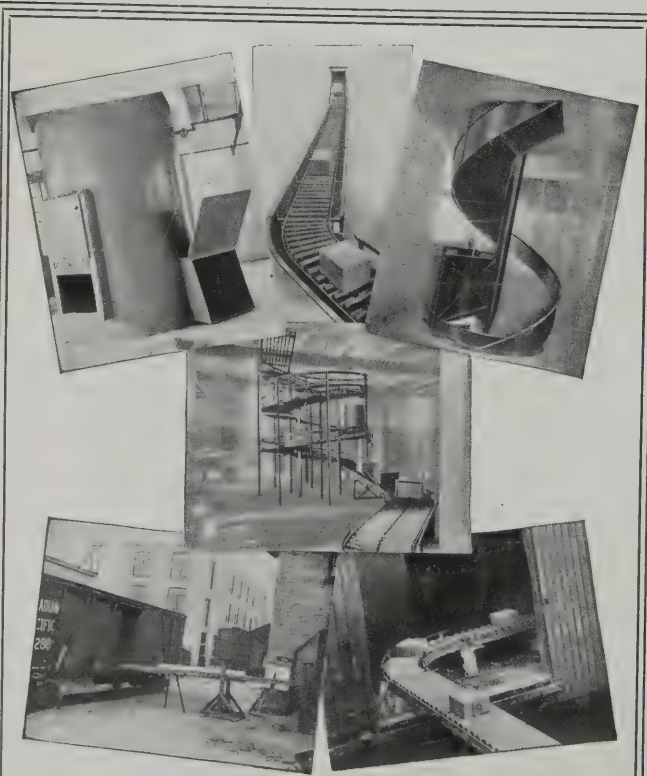
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For Full Information Write for Catalog I

Canadian Mathews Gravity Carrier Co., Ltd.
PORT HOPE, ONT.

storeys when needed. The practical men who are interested in the company are Messrs. Ridge & McCormish, of Akron, Ohio, but the company is organized and financed by Ontario business men and Ontario capital, with head office in Toronto. Officers are: President, J. H. Greenberg; vice-president, Amos Tipling, Wingham; secretary-treasurer, J. A. Cambell, Toronto.

Fifty Per Cent More Space

Eze Manufacturing Co., Limited, Toronto, Have Acquired Larger Premises for Expansion

The Eze Manufacturing Co., Limited, manufacturers of grocers' sundries, who have been located at 182 Adelaide St. West, Toronto, have purchased the building at 187-189 Parliament Street. Here they will have nearly 50 per cent. more floor space, with opportunity for doubling capacity again later on. The move is being made by the company to take care of rapidly expanding business, as well as to have their own premises in which to instal some new machines.

Make Exclusive Line

The Kimber & Hillier Mfg. Co. Now Manufacturing Drop Forge Dies and Tools

The Kimber & Hillier Mfg. Co. are a new company recently established in St. Catharines for the manufacture of drop forge dies, trimming dies, punching and bending tools. Their plant is composed of a three-storey brick building, with large frame building for storage in the rear, and is located on the Thorold Road. Their efforts have been favorably received, and they are at present making drop forge dies for several of the foremost drop forges in Canada. They claim to be the first and only firm devoted exclusively to the manufacture of drop forge dies and tools.

New Sales Office

Engineering & Machine Works of Canada, Limited, Open Eastern Sales Office in Montreal

The Engineering & Machine Works of Canada, Limited, St. Catharines, Ont., owing to the rapidly increasing demand for their products, consisting of boilers of all types, horizontal, vertical, locomotive and marine, tanks, plate work of all descriptions, etc., and particularly in connection with their recent and very successful venture, the manufacture in Canada of the Keystone Light Traction Excavator, Model 4, have found it necessary to open another eastern sales office in the Birks Bldg., Montreal, where inquiries can be more quickly and satisfactorily handled. This is in addition to their sales office in the Sun Life Bldg., Sherbrooke, Que.

Will Make Trucks

Gotfredson-Joyce Corporation, Limited, Formed to Take Over Plant at Walkerville

Benjamin Gotfredson, president, and Frank H. Joyce, Secretary and treasurer of the American Auto Trimming Co., Limited, Walkerville, have formed the Gotfredson-Joyce Corporation, Limited, for the purpose of manufacturing trucks. They have taken over the Gramm plant at Walkerville and are at present remodeling it, with the expectation of starting operations by about the end of April. The products of the factory for the present will be confined to 2½ ton trucks of an approved model, which has been in service and tested for the past six or eight months. The company expect to produce at least one thousand during the coming year. Mr. Gotfredson, who is also president of the American Auto Trimming Co., of

Canadian Carbonate Company, Limited

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1/8 to 5/8" thick up to 48" wide, weighing up to 1060 lbs. each

Fluid Compressed Steel Forgings

We manufacture Merchant Bars, Rounds, Flats, Squares, Ovals, Half Ovals, Tires, Sleigh Shoes, Plain or Twisted Concrete Bars, Agricultural Sections, Cold Drawn Shafting, Machinery Steel, Angle Bar Fish Plates, Track Spikes and Bolts.

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Toronto Office : Excelsior Life Building

Ohio; of the American Auto Trimming Co., of Michigan, and of the Reading Corporation of Detroit, and until recently president of the Saxon Motor Car Co. of Detroit, is president, and Mr. Joyce, who holds a similar position in all the Trimming Companies, is secretary and treasurer.

Concentrating at Thorold

Beaver Board Companies Centre Their Canadian Plants to Facilitate Production

In order to effect economies in production, the Beaver Board Companies have removed their board mill from Ottawa to Thorold. The plant at Ottawa formerly supplied all the Canadian and export trade, but with increased demand it has been unable to supply these markets and during the past year or more a large part of the trade has been handled through the Buffalo plant. At Thorold a new finishing plant, 125 x 362 feet, has been built, which will give an output of 5,000,000 square feet of finished board per month at the outset, this being capable of increase. A new office building, 48 x 80 feet, has also been built.

Making Improvements

Midland Woodworkers Limited are Adding to Equipment and Increasing Capacity

Midland Woodworkers Limited, Midland, Ont., who took over the business of the Georgian Bay Shook Mills last October, have discontinued the manufacture of box shooks and are devoting all their attention to the making of doors, sash, mouldings, hardwood flooring and veneer panels. It is planned to develop the business as much as possible, especially in the hardwood flooring department, and new machinery is being installed for the purpose. The door plant, which has a present capacity of 250 doors per day, will be doubled before long. The president of the company is A. H. Vanderburgh of Toronto; W. H. Firstbrook of Toronto is vice-president; R. H. Scrivener, Midland, secretary-treasurer, and Fred M. Beatty, formerly of Saskatoon, is managing director.

Rebuilding Plant

Columbia Handle and Lumber Co., Limited, London, are Replacing Factory Damaged by Fire

The Columbia Handle and Lumber Co., Limited, London, whose plant was recently damaged by fire, are rebuilding, and expect to be in operation again early in May. The new plant will be the same size as before, but, by installing more up-to-date machinery and making other improvements, capacity will be increased. About fifty or sixty men will be employed. The product of the company consists of handles of all kinds, neck yokes, whiffletrees, and hardwood lumber.

To Start This Month

Canadian Nashua Paper Company, Limited, Peterboro, Expect to Start Some Machines Shortly

Owing to delays in getting machinery, the Canadian Nashua Paper Co., Limited, Peterboro, have not yet started operating, but hope to get some machines going this month. The plant has about 70,000 square feet of floor space and the work of erecting both waxing and gumming machinery is now going on under direction of Mr. George W. Watson, the company's engineer. Supplies of suitable raw materials have been secured in Canada and while a close relationship will be maintained with the parent company in Nashua, N. H., the Canadian enterprise will be an entirely separate business. Mr.

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All Grades from our own Timber Limits



Spruce and White Pine

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Kraft and Unbleached Sulphite Pulp

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BATHURST, N.B.

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Neglect nothing that will add to your character as a straightforward and service-giving retail merchant. The advantages to be derived from the establishment of the prospective buyers' confidence in your store are too many to sacrifice to the fitful and unstablising effect of price cutting.

Products, bearing the confidence of the community at large, give to your store, the necessary prestige that controls the will of the buyer when desiring to purchase goods of real value. Products manufactured by a progressive and live organization and which through their direct association with a million families, are known from coast to coast, familiarizes each one of these families with your store.

With every such product, sold through your Agency, there rebounds to your credit a substantial profit upon which your business can be firmly established and well extended.

Such products are manufactured and marketed by McCLARY'S, the largest makers of Stoves and Furnaces in the British Empire.

Our nearest Branch is at your service.

McClary's

LONDON, TORONTO, MONTREAL, WINNIPEG
VANCOUVER, ST. JOHN, HAMILTON
CALGARY, SASKATOON, EDMONTON
CANADA

Peter Traver, who has occupied similar positions in the American mills for many years, will be superintendent.

The Canadian Nashua Paper Co., Limited, with an authorized capital of $500,000, have been incorporated to take over the Canadian business of the Nashua Gummed & Coated Paper Co. of Nashua, N.H. Officers are,—President, James Richard Carter, Boston; vice-president, Winthrop L. Carter, Nashua; treasurer, H. T. Kehew, Dansville, N.Y.; general manager, Robert A. Brown, Peterboro.

Erect New Plant

St. Lawrence Welding Co., Limited, Montreal, Replace Building Burned in February

The tank manufacturing department of St. Lawrence Welding Co., Limited, Montreal, which was destroyed by fire on February 5, has been replaced by a fireproof brick and steel structure, 148x60 feet and 25 feet high, into which the company moved about the first of the month. It has been equipped with two travelling cranes on run-ways, with individual jib cranes over all the heavy tools. The smaller tools which were damaged by the fire have been replaced. This new shop will greatly increase the company's capacity. Orders are being received beyond their best expectations.

Glass Factory for Coast

Alunite Mining & Products Co., Limited, Secure Site for Plant in Vancouver

The Vancouver Harbour Board have just leased four lots on Granville Island to the Alunite Mining and Products Co., Limited of Victoria. The company intend to erect a glass factory on the site, and according to information given the Harbour Commissioners, expect to begin production of glass within four months. The company hold an extensive series of claims on Kuyquot Sound, on the west coast of Vancouver Island, and plan extensive developments.

Extension of Soap Works

Lord Leverhulme Has Acquired Extensive Property in Vancouver for Enlargement

Lord Leverhulme when recently in Vancouver completed negotiations for the purchase of extensive water-front property on Vancouver Harbour. It is stated that the intention of the purchaser is to erect a factory as an adjunct to the present local industry, and to build docks and wharves. It is probable that the wharves will also be used in connection with the fishing interests in which Lord Leverhulme is concerned on the Pacific Coast.

Link Up Steel Industries

B. C. Commissioner of Industries Has Plan for Consolidating a Number of Companies

Major D. B. Martyn, D. S. O., Commissioner of Industries for British Columbia, has under consideration a scheme for the consolidation of the several companies at present manufacturing steel from scrap iron on the mainland and islands of this province. There are at present in British Columbia a number of companies engaged in the steel industry, each of them using scrap iron with imported pig iron as their basic material. The British Columbia Government consider the industry of such intrinsic importance that the plan now being considered will probably result in the amalgamation of existing plants, possibly assisted financially by the Government in order to place the industry on a well-founded and profit-

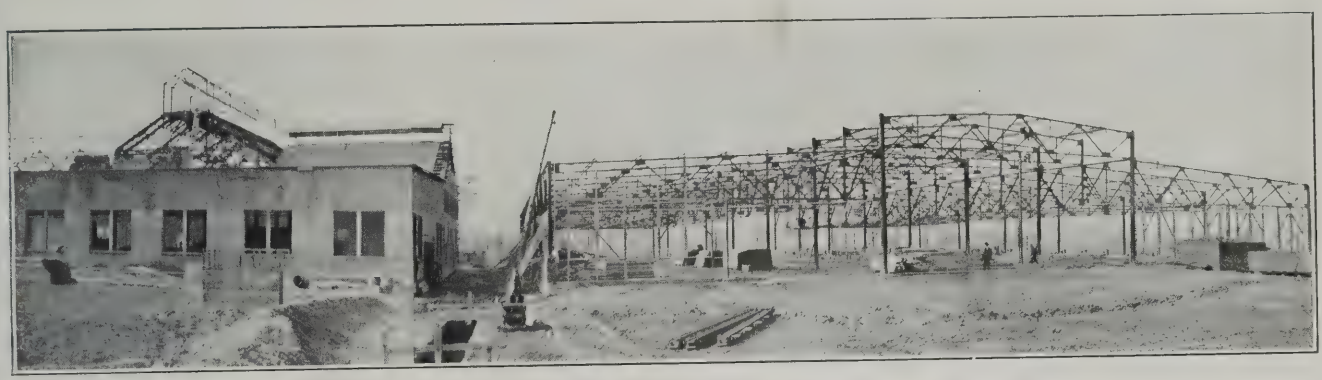
THE HAMILTON BRIDGE WORKS COMPANY

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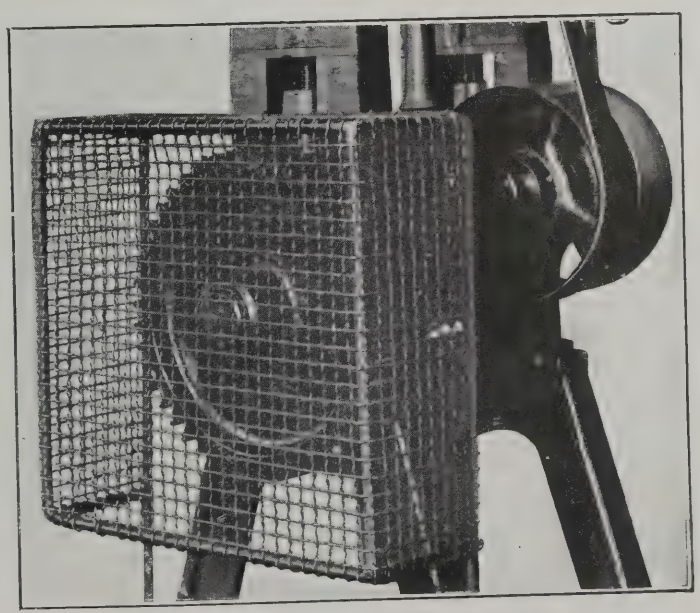
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Wire Work of all kinds

C. H. JOHNSON & SONS, LIMITED

Wire Works: St. Henry, Montreal

able basis. The companies at present existing possess among them sufficient machinery and equipment to provide for one plant of considerable dimensions.

Will Build New Plant

Laminated Materials Company Propose to Erect a Second Plant in New Westminster

The Laminated Materials Company of New Westminster will shortly establish another plant, the city of New Westminster having recently given this company an option on a site for that purpose. Under present conditions, where the company's plant is now located, there are difficulties which hamper larger operations, although the more specialized lines can be carried on economically. It is probable, therefore, that the present plant will continue to operate in that direction after the new one is built.

To Enlarge Scope

Sidney Rubber Roofing Co., Sidney, B.C., Will Enter the Pulp and Paper Field

One of the more recent firms to take advantage of the British Columbia Government's policy of assisting financially in the extension of industry in this Province is the Sidney Rubber Roofing Company of Sidney, B.C. This company has arranged a loan from the Government, through the Industrial Commissioner, Major D. B. Martyn, of $100,000. The chief object to which this loan will be applied is the erection of a pulp and paper mill, and generally to add to existing facilities at its command. It is the firm's intention to branch out in the paper business, and to develop a connection that will enable it to compete with other and older paper concerns in this and other provinces.

Branch in Vancouver

Woodtite Laboratories, of Modesto, California, Intend Establishing a Canadian Subsidiary

The Woodtite Laboratories of Modesto, California, recently advised the Vancouver Office of the Association that it is the intention of that company to establish a plant in Vancouver. This plant is for the purpose of meeting present and future requirements of the Canadian trade west of Winnipeg. The Woodtite Company manufacture specialties known as Spoktite, Toptite, Kantmar Autowash, Gasketite, and other auto accessories for which there is a wide demand in Canada.

Plant Near Completion

Canada Western Cordage Co., New Westminster, Will Be Operating in the Near Future

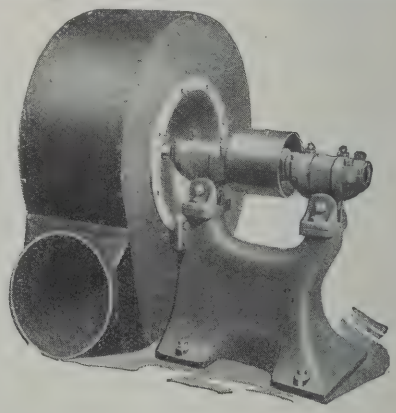
The buildings for the plant of the Canada Western Cordage Company at New Westminster are nearing completion and it is expected they will be in operation shortly. The loan of $200,000 from the British Columbia Department of Industries is assured and the company consequently will not be hampered by the lack of funds. Brig. Gen. V. W. Odlum was recently added to the directorate of the Company, as representative of the Provincial Government in connection with the disbursement of the government loan.

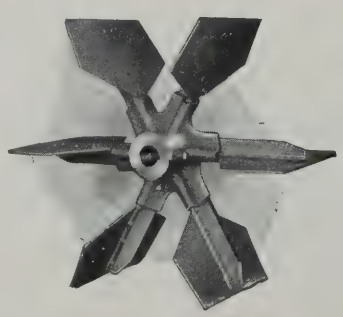
British Company's Enterprise

J. S. Fry & Son, Limited, Chocolate and Cocoa Manufacturers, Secure Plant in Montreal

The Montreal plant of Carriage Factories, Limited, operated under the name of the Heney Carriage & Harness Co., has recently been acquired by J. S. Fry & Sons, Ltd., the well-known British manufacturers of breakfast cocoa,

"CANADIAN"
MILL EXHAUSTERS
Handle Any Loose Material





THE Canadian Standard Mill Exhausters will handle any kind of material efficiently — sawdust, shavings, cotton lint, or stringy material, gases, fumes, smoke, etc.

They are adjustable to any angle of discharge; have universal type of wheel; carefully constructed self-aligning oil-ring bearings.

Catalogue 410-14 gives technical data and prices.

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Every Insurance Company makes an allowance on the premium rate for the installation of APPROVED Extinguishers.

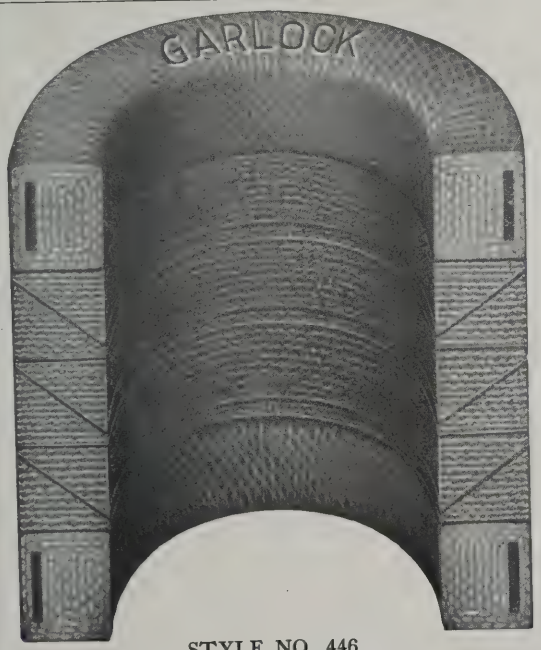
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These packings are guaranteed to give satisfactory service under the above conditions.
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Deterioration shows the folly of inadequate surface protection. Cut down your annual loss through unnecessary depreciation. Practical tests have proved the all-round value of

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Chromic Acid Black Paint

as a preventative of rust on all metal surfaces. Specified by architects and engineers and used on structural steel throughout the country. Write us.

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Toronto MONTREAL Vancouver

etc. The latter will secure possession in the course of a few weeks and as soon as possible will start manufacturing operations.

In the meantime announcement has been made that arrangements have been completed for the association of the business interests in Canada of the Walter M. Lowney Co. of Canada, Limited, and J. S. Fry & Sons, Limited. The identity and good-will of each firm will be maintained, but economies will be effected through the association, both in the purchase of raw materials and in the marketing of the finished product. A Canadian corporation, J. S. Fry & Sons (Canada), Limited, has been established to conduct the business of the Fry Company.

Branch at Gravenhurst

Rubberset Co., Limited, Toronto, Take Over Plant for Manufacture of Wooden Handles

The Rubberset Co., Limited, Toronto, have acquired property in Gravenhurst with a view to establishing a branch industry for the manufacture of wooden handles for use in paint, lather, tooth and nail brushes. The size of the plant is approximately 40 x 250 feet with various additions, kiln facilities, etc. The company expect to start operations within the next two months and will employ about fifty hands.

Have Completed Addition

John Palmer Co., Limited, Fredericton, N.B., Now Occupy Large Extension to Their Plant

During the past fall and winter the John Palmer Co., Limited, Fredericton, N.B., tanners and manufacturers of oil tanned footwear, have erected an additional wing, 50 x 100 feet, three storeys and basement, similar in construction to the main building. The building was completed in February. The extra space was required to take care of the general expansion of business on regular lines of shoepacks, moccasins, farm and sporting shoes. During the past six months from 50 to 60 new names have been added to the payroll.

Doubling Capacity

Canadian Postum Cereal Co., Limited, Windsor, Make Addition to Grape-Nuts Building

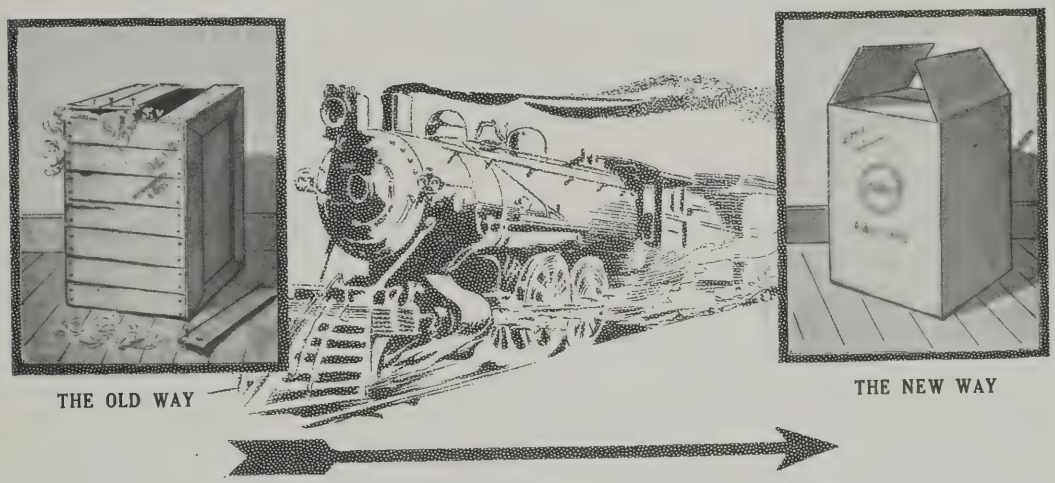
An addition, which will practically double its capacity, will be made by Canadian Postum Cereal Co., Limited, Windsor, to their Grape-Nuts process building. This will be 80 x 146 feet and is required by the extensive demand for export. The company are also putting an addition, 84 x 98, to their warehouse for the purpose of stocking sufficient goods to take care of the demand in the busy season.

A Fine Installation

The Brown Boggs Co., Limited, Hamilton, Have Plans for Wash, Lunch and First Aid Rooms

Additions to their foundry which will more than double their present output, are to be made by the Brown Boggs Co., Limited, Hamilton. The installation will eventually include a 25-ton travelling crane, a new heating system and all the latest improvements in foundry equipment and shop conditions. There will be a wash-room and lunch-room, 64 x 20 feet, finished in white tile with steel lockers, enameled wash basins and space for ten shower baths. There will also be a first-aid room large enough for three stretchers, fully equipped to give aid in any kind of accident. This equipment will be one of the finest foundry installations in Canada.

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The Preston Woodworking Machinery Co., Limited, Preston, expect to complete a 100-foot-square addition to their plant this spring. They are forced into this extension to take care of orders which are much beyond the capacity of their present plant.

H. J. Jones' Sons, Limited, lithographers, London, will make an addition to their plant, 40 x 90 feet, two storeys and basement, to be used for extension of business. It will be ready in the summer.

Valleyfield Coated Paper Mills, Limited, have been incorporated, with capital of $300,000, to take over and operate the National Paper Co., Limited, Valleyfield, Que. The company have completed an extension, 36 x 100 feet, and have added equipment increasing output by about 50 per cent.

The Toronto Carpet Manufacturing Co., Limited, are increasing the capacity of their power-house and are erecting a new dye-house.

The firm name of the Ham & Nott Company, Limited, Brantford, has been changed to Ham Brothers, Limited, and the capital stock has been increased to $1,000,000. The change is one of name only, and will not affect in any way the control or policy of the company.

The Prest-O-Lite Co., of Canada, Limited, are erecting a two-storey battery warehouse and assembly plant on Tache Avenue, Winnipeg. It is only a small plant costing approximately $25,000 and is purely for storage and assembly of the company's product shipped to Winnipeg knocked down.

An industry which has been coming to the fore during recent years in British Columbia is the manufacture of fish oil and fertilizer from dog fish, fish scraps and refuse from the canneries. A plant for this purpose is now being operated at Rendezvous Island by Mr. Johncox, and another plant for carrying on the same business is expected to be in operation soon under the management of Mr. J. B. Jardine.

Plans have been completed for the construction of a $10,000 addition to the already extensive premises of the Vancouver Knitting Company in Vancouver.

A new plant for canning tomatoes, apricots, peaches and apples, is proposed for Summerland, B.C. The intention is to interest local capital in the construction and operation of the new plant.

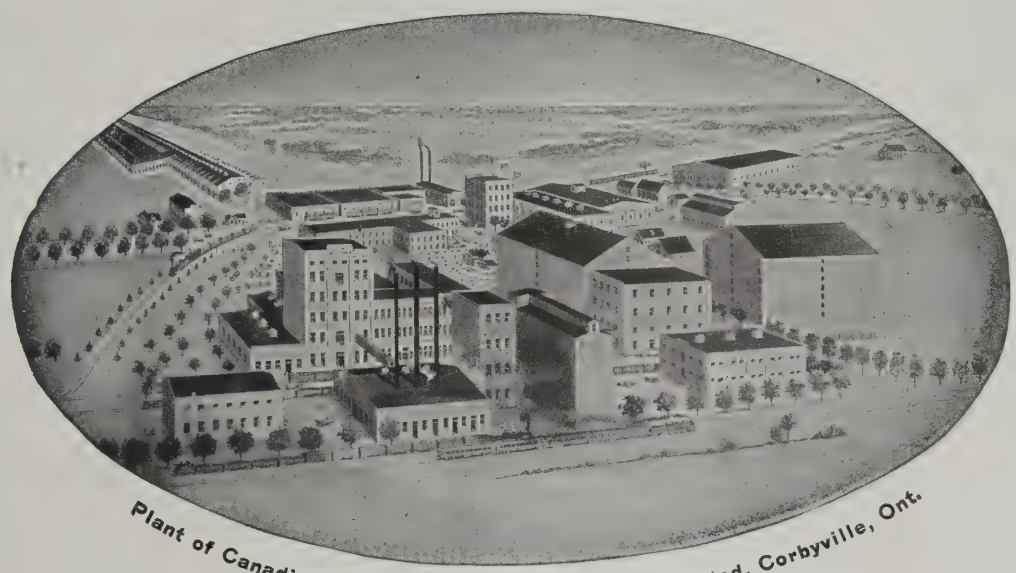
It has recently been announced that the B.C. Marine Limited of Vancouver have increased their capitalization to $1,000,000, and propose extensive alterations and improvements, with a view presumably to taking up shipbuilding on a larger scale.

The Western Canada Woollen Mills are installing machinery at their buildings in Clark Drive, Vancouver, and expect to be in operation this month.

The first unit of the plant of the Britannia Wire Rope Company on Granville Island, Vancouver, is now nearing completion. This building is 120 ft x 200 ft in size, and the contract price is $40,000. As soon as the new building is completed it is expected that work will be commenced on the necessary wire rope machinery now en route from England.

Contracts for the Canadian Carbonate Co's new plant at Vancouver report satisfactory progress and it is expected that production will be started not later than June.

ALCOHOL



Plant of Canadian Industrial Alcohol Company Limited, Corbyville, Ont.

With a capacity of 450,000 (proof) gallons per month we are the largest producers of Alcohol in Canada.

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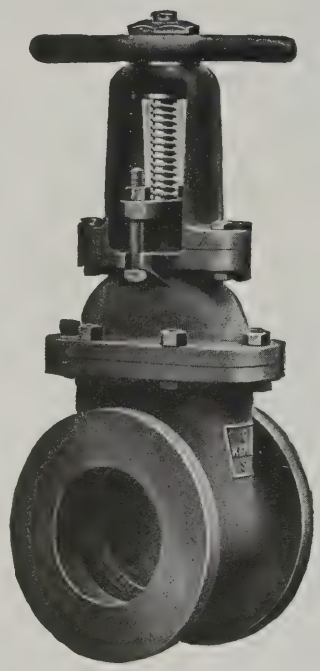
Those who are using Duty Paid Alcohol in their manufacturing processes would do well to consult us with a view to using it "In Bond," thus avoiding the use of two-year-old Alcohol. Under the rules and regulations of the Department of Inland Revenue, newly made Alcohol may be used "In Bond." This Alcohol is much cheaper than two-year-old.

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SELLING IDEAS TO EMPLOYEES

An American manufacturer believes that it is advisable to move quietly and without urging in getting employees to take up new ideas. For example he has introduced a shoe repairing department and each year sells employees their potato supply, but it took a long time to get them interested in these two plans.

(From "Factory.")

That a man cannot do good work when his feet are not properly shod is a pet theory of William L. Ward, President of the Russell, Burdsall and Ward Bolt and Nut Company.

But Mr. Ward did not merely believe it and let it go at that—he put his theory into practice. He ordered that a cobbler be hired and space be provided for him in the plant. Then he practised another theory of management which has become a policy in his company—he had a simple notice posted announcing to employees that the cobbler was there, that he would fix their shoes and the footwear of their children, and that he would do it at cost.

Then he waited. "Announce a move and then quit talking about it. Let it have its effect naturally and gradually. Then you'll avoid the appearance of forcing something upon employees that they don't want," Mr. Ward says.

Well, that's the policy he followed in this cobbler case and four or five weeks went by and the cobbler was paid his wages, but he earned none. And still Mr. Ward stuck to his announce-it-and-quit-talking policy. The notices on the bulletin boards were beginning to yellow at the edges when a foreman left a pair of shoes with the waiting cobbler. And then another, and then gradually the more cautious came in till in only a short time after the ice was broken the shop was doing a large shoe-repair business which has held up ever since.

With this plan in effect there is little excuse upon the employee's part for a boost in the accident rate or an increase in illness due to out-at-the-toe shoes or those having flimsy, leaky soles.

Mr. Ward has been successful before in getting plans started, that involve some action on the part of the workmen, by letting the idea soak in slowly with no attempt to force the issue. He says that some workmen are suspicious of anything new. They want to walk all around a thing and size it up from all sides before committing themselves. This takes time, but it's a good management policy to be patient in such cases, Mr. Ward says.

For instance, here's an example where the reward didn't come for over two years. Some years ago Mr. Ward thought it would be a good plan to buy potatoes in quantity and sell to employees at cost. So one fall he bought a large quantity and posted a simple announcement. Only a very few workmen bought, however.

But no follow-up notice was ever put up. Those who wanted to, bought—the rest were not urged. He sold what were left to retailers in the town. The next year he repeated the plan even to the simple notice on the bulletin board. This second year there were a few more customers, but still a surplus of potatoes.

But in the years following it has been difficult to get enough potatoes to supply his employee demand.

Doesn't all of this tend to emphasize the fact that management not only involves getting the idea, but a study of sales methods in selling it to the workman? And letting a good plan sell itself often has some distinct advantages.

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INCREASE IN JAPANESE SHIPPING

Japan's fleet increased by about forty per cent. both in number and tonnage during the war. However, not a single good passenger steamer was added, only standardized freighters of certain types being built. Many things are yet to be done by the country if she wishes to maintain the trade captured during the war.

(From "American Industries.")

Including the vessels registered in her colonies Japan's total fleet numbered 11,943 aggregating 2,419,928 tons gross, at the end of 1914. The fleet has increased greatly since that time, and at the end of 1918 the total number of vessels was 16,676, totalling 3,388,085 tons. It will be seen that the fleet has increased by about forty per cent. both in number and tonnage.

A Temporary Slump.

Following the conclusion of the armistice the shipping market slumped and a number of shipyards suspended their operations or were closed. This slump was, however, only a temporary phenomenon, and the shipping market will surely improve, for it will take considerable time to make good the loss of tonnage suffered by the belligerents during the war and to ship supplies of foodstuffs and other materials required by the European countries. As a matter of fact, there has recently been a steady advance in freight and charter rates. The shipbuilding industry has also become active, and in addition to the vessels for the United States much tonnage is under construction. The ships which are now on the stocks alone amount to about 400,000 tons gross. The activity in the shipping and shipbuilding industry is a matter for congratulation, but when we consider the cause of this activity and the seaworthiness of our vessels it is impossible for us to remain idle.

It is superfluous to say that the activity in Japan's shipping trade is due to the effects of the war, which has led to the withdrawal of foreign shipping lines from certain quarters of the world and which has increased the world's demand for tonnage. The situation must change when European and American countries have resumed their shipping services in various parts of the world, and when foreign countries are in a position to build ships for other countries.

Only Freighters Built.

Not a single good passenger steamer was added to Japan's fleet during the war; only standardized freighters of certain types were built. The Japanese shipbuilders gained experience in building such steamers within a comparatively short space of time. They secured no additional experience in building vessels of a superior type. Many things are yet to be done by us if we wish to maintain the trade which we captured during the war and to further extend our activities against the competition of foreign countries. Among other things, restrictions on the employment of a certain class of ships should be removed in order to promote the development of Japan's shipping, and this is the reason why the Government has recently extended the areas of the near-sea route beyond the bounds of which second-class cannot sail.

During the war, vessels were generally built hastily and many ships were put to too great a strain in war time. Marine officials, should, therefore, exercise a greater care in inspecting the seaworthiness of craft.

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Possibly a little higher in price but better value

Lightning Rods for Factory Protection

Continued from page 87

the peak to get to the rod, but travels downward along the wet conducting roof—it will probably follow a rafter if the roof is dry—and then along the eave trough and water spout then jumping from the spout to the ground, or into the basement, as is more often the case, frequently killing stock and sometimes firing the building. If there are no troughs or spouts, it follows the posts, shattering them more or less and frequently causing fire. Five years ago, when Bulletin 220 was written, this was all pointed out, yet many are still rodding buildings in the same old defective way.

In December 1918 the company with which I am now identified, offered me my present position. At the college scarcely a week went by but someone wrote me asking if their buildings were properly rodded. In many cases they were not, and it vexed me sore to know that so much improper rodding was being done, chiefly because the men doing the work in those cases were ignorant of the scientific principles involved, and so could not really be expected to turn out a scientific job of rodding. Many times in the past five years I had thought seriously of quitting the college and entering the lightning rod business, with a view to trying to put it on a scientific basis. But each time I was confronted with the need of capital—the one thing that a professor at the college can never have if dependent on his salary.

No Rule of Thumb can be Given

Grounding from the peak is not the only defect existing in much rodding already done, and still being done. The principle to be kept uppermost in mind when devising a plan for a building is: To provide a system that will prevent strokes in all cases where prevention is possible, and which, at the same time, will carry off harmlessly any strokes that cannot be prevented. For devising such a system no rule of thumb can be given. Each building must be considered individually, for no two are constructed alike. All the eave-troughs, water-spouts, roof gutters, water systems, structural steel, and other metallic portions of the edifice must be connected up in such a way that when a stroke occurs it cannot find any place to jump. It finds all conductors connected in the system and all grounded, thus providing continuous passage to the ground along all possible paths. If the current finds no gap to jump, it can do no harm. Recently I spent two days starting one of our dealers. We studied out systems for several large, complicated buildings in his territory. He has been rodding for ten years, and after getting a grasp of the scientific principles and seeing the importance of working in harmony with them, and learning how to do so, his verdict was that he had been working in the dark all those years. And he is one of the best rod men I have met, being the secretary of a real live mutual insurance company and engaged in other lines of business as well. If he was working in the dark, there are still many others who are doing so.

Since the above was written I have received a report of a so-called rodded building being burned—a barn 54 x 66, with two additions 16 x 46 and 12 x 44, and only one ground rod

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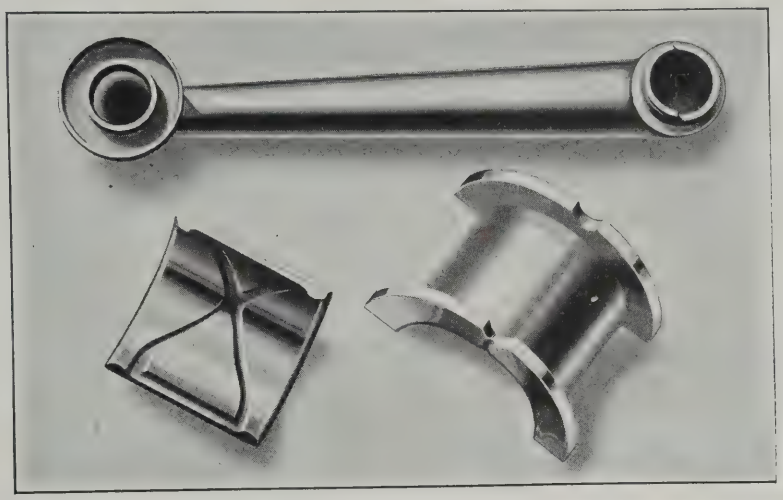
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for that great area. Any man or company doing rodding like this to-day should be open to prosecution.

Two Kinds of Electric Charges

Science lies at the bottom of lightning rods and rodding, as explained. The laws of science, on which the practice of rodding depends, will now be considered.

Electric charges in the thunderstorm are of two kinds, positive on the cloud and negative on the earth. A positive charge attracts a negative and vice versa. Similarly like charges repel one another, e.g. positive repels positive and negative repels negative, giving us the law that "like charges repel one another and unlike charges attract." From this law several very important results follow.

First, thunder clouds travel low because of the attraction between the cloud and earth charges. And as these charges increase the cloud is pulled lower and lower until by and by the distance is short enough and the electric pressure great enough that the electricity jumps from the cloud to the earth, heating the air white hot as it does so. This is the lightning flash.

Secondly, the earth's negative charge is located directly under the cloud, and travels along as the cloud moves forward. When the earth's charge finds a building or a smoke-stack it is drawn up on the structure by the attraction of the cloud's charge, which often brings them close enough together to cause a flash between the two charges.

Thirdly, electric charges reside on the surface. Take the cloud for example. Since every little particle of positive repels every other, none of it stays in the centre of the cloud, each particle being driven to the surface by the repulsion of all the others. Similarly the negative charge on the building resides on the surface.

Fourthly, "electricity leaks off points." Why does it not leak off a round ball? Because the air offers great resistance. But when there is a point on the charged body particles of electricity get directly behind those on the point and hence are able to push them off into the air in spite of the resistance. This can all be illustrated by an electric machine; and the charge leaves the point so rapidly that it makes a hissing sound; and if the experiment is done at night one can see a blue flame at the points. In this connection a very interesting occurrence was related to me on July the 19th. During a thunderstorm one night not long ago, a dealer was talking to an unbeliever in lightning rods. They stepped outside to watch the storm and to their surprise saw a streak of blue flame two or three feet long shooting off each lightning rod point. The unbeliever bought lightning rods for his own barn next day. The names of both these parties will gladly be supplied to anyone wishing to make personal enquiry. Since electricity leaks off points, rods if properly installed will prevent strokes in most cases by reducing the potential below the breaking point. Sometimes owing to special conditions a building becomes charged so suddenly that the points cannot allow the charge to leak off quickly enough to prevent a stroke. In such cases the rods if properly installed will carry off the flash without damage.

Lightning Travels on Surface

Fifthly, not only do charges reside on the surface, but when there is a lightning flash, to a rod the current of electricity travels on the surface, not through the body of the rod.

Another law of electricity that is very important from a lightning rod standpoint is that some substances "conduct" electricity very readily. They are, therefore, called "con-

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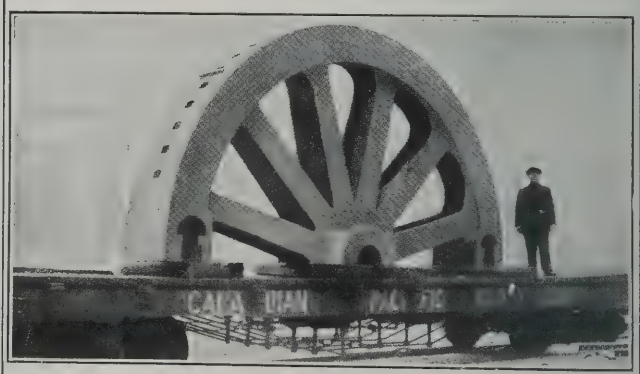


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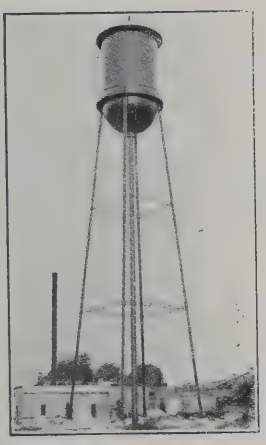
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ductors." Others, like air, offer great resistance to the passage of electricity and hence are called "non-conductors." Wood is a conductor, but a very poor one, so much so that it is often called a non-conductor. Copper, for example is about six or seven times as good a conductor as iron.

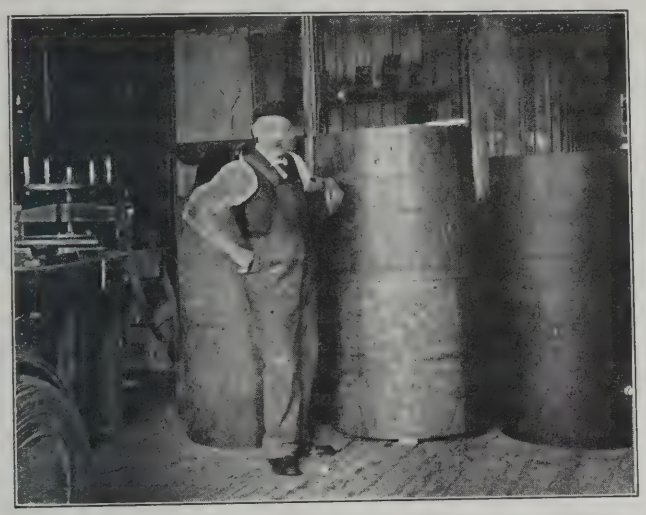
On July 9th, 1916, I was driving an automoible on the 8th line of the Township of Maripose, Victoria County. Just as we reached the place we were going to visit, a very violent thunderstorm came on. I drove the car into an open shed under one corner of the large barn. It began to rain so heavily that I decided to wait till the storm slackened. While waiting I went to tighten a nut and just when the wrench was about an inch from it, a flash of lightning occurred some distance away, and to my surprise I received a distinct shock from the car and saw the spark about an inch long. The car, on rubber tires, was insulated, and the flash induced a charge on it, which passed to the ground through the wrench and my body. If the wrench had been in contact when the flash occurred I would neither have experienced a shock or seen a spark. If there had been gasoline fumes or other highly inflammable material where that spark occurred, there would have been a fire. It is to prevent these sparks by induction that we advise connecting up metal portions of the structure. Induction is momentary, it occurs only while the original current is starting and liekwise while it is stopping. Induction plays a very important part in devising a scientific system of rods for a building.

One step further we must go: Not only does a lightning flash produce induction on metallic bodies in the vicinity, but when a flash starts along a conductor it induces a momentary back current in the conductor which is carrying the original current itself and hence is called "self-induction." Likewise when the flash is stopping there is self-induction. Self-induction is a very contrary sort of chap—he acts against the main current when it is starting, thus being somewhat similar to resistance, and holding the main current back; but when the main current tries to die out then self-induction switches round and acts with it, thus actually increasing the intensity of the discharge.

The chief function of lightning rods is to prevent strokes. For this the fundamental principle is to use a scientific rod put on scientifically so that the charge on the building can most easily pass to the rod and leak off the points quietly into the air where it is attracted upward to join the positive in the cloud. In all cases where the building tends to charge up gradually, it is possible to prevent strokes, but when the building charges instantaneously as is sometimes the case, then the points haven't time to let the charge leak off, and a flash occurs. In such cases it is necessary to have the system so designed that from every part of the building the rod forms the easiest path to the earth. When it is so designed the flash is just as harmless as if it had never occurred.

The old system of rodding buildings consisted in placing cable along the peak and running straight down the gable from the peak into the ground at one or both ends. Scientifically this is wrong. To be sure it will give some protection but not the best. Even when dry the roof is a conductor though a poor one. Lightning does not always strike the highest points, as already instanced. Suppose it strikes the eave, or part way between there and the peak it will not go up the roof against nature to get on the rods, but will follow the poor conducting wood to the eave, along the eave-trough and down the water spout, whence it jumps to the ground. If there is water coming out of the spout the flash may follow it to the ground and escape harmlessly, or if it finds an easier way by jumping into the basement, along pipes to the floor it will do so.

Scientific rodding will always ground from the eaves, and



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connect the cable with the eave-trough and the bottom of the water spout. Then whether the flash occurs to the peak, the slant roof or the eave it finds a conductor to take it into the ground. On an oblong building at least two grounds are necessary at diagonally opposite corners. On complicated buildings the number varies with the design of the buildings.

For complicated buildings it is not an easy matter to design a scientific system. Every important metallic part of the structure that is near the cable, such as roof gutters, eave-troughs, water pies, structural steel, must be considered and connected up and grounded in accordance with the laws of science in order to give the best protection. The induction on any of them during a stroke may cause a spark and fire the building if not scientifically protected; or they may form part of a path for the main charge, which would then have to jump a gap, again causing damage or fire. Hence the only safe course is to make them all a part of the system.

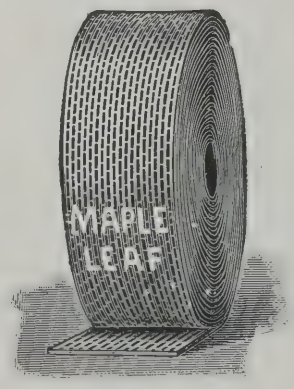
On wooden, slate or patent roofs it is necessary to run the cable from the grounding up to and along the peak, with a point every 20 to 25 feet. Flat roofed buildings should have cable placed around the roof, with points at suitable intervals. And all prominent features such a cupolas, chimneys, dormers, etc., should have points on them, all connected to the cable. On metal roofs it is not essential to run the cable over the roof, but simply connect it to the metal at the eaves and then run it into the ground deep enough to reach permanent moisture. Since the metal roof has such great electrical capacity, it is advisable to use more groundings than with the wooden roof. On very large buildings it is often customary to attach a copper plate to the end of the grounding cable and bury this deep in a bed of powdered charcoal which has a high affinity for moisture and insures a great electrical capacity for the grounding.

Copper rods are the best because more durable than iron or aluminum, and scientists, e.g., Sir Oliver Lodge and Dr. Steinmetz, claim that flat conductors are better than round becausce they have more surface; one property of electricity being that high potential currents like that in the lightning flash travel on the surface, it necessarily follows that a flat cable has a much greater carrying capacity than the same strands twisted in a round cable. Besides there is less self-induction on a flat cable than on a round, hence less resistance, and hence less danger of side flash from it in case a stroke does occur to it.

In Michigan a number of companies insuring farm buildings have divided them into "rodded" and "unrodded" classes assessing each class for its own losses. They find the assessments in the rodded class are about one-third less than on the rodded. The Mutual Fire Prevention Bureau, Oxford, Michigan, which is an association of ten companies insuring mills, elevators and warehouses throughout the United States reports that in eight years lightning has been responsible for more losses to members of the association than any other single cause. To induce their patrons to protect their buildings they give a reduction in premium of 10 cents per $100.00 of risk. What lightning rods do for farm buildings, mills and elevators, they will also do for other classes of buildings.

Members of the Association who are contemplating a visit to the old country are invited by the *Canadian Export Pioneer*, Craven House, 113, Kingsway, London, W.C. 2, to make use of their office for the forwarding of correspondence. A line to the editor of the *Pioneer*, advising him of their intention and probable date of arrival would facilitate the arrangement.

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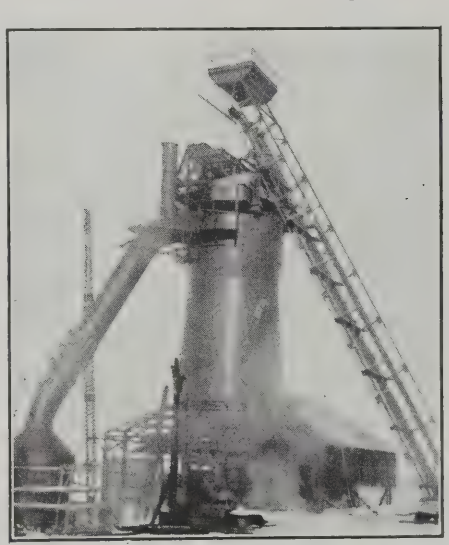
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Labor's Requests and the Government's Answer

Continued from Page 86

203-204, Congress Proceedings, 1919. The importance of good housing is now generally recognized and whilst many of the suggestions incorporated in the report would be subjects for Provincial enactment and administration, yet it is urgently requested that consideration be given to the suggestions so far as they are within the scope of Federal enactment or legislation, in order that the fullest assistance may be given to workers to secure their own homes.

RURAL MAIL CARRIERS

During the past year requests have been made for improvements in the conditions under which rural mail carriers work. The Trades and Labor Congress of Canada, at its Hamilton convention, endorsed the requests of the Dominion Rural Mail Carriers' Association for improved conditions as embodied in Resolution 107, page 209, and Resolution 72, page 212, Congress Proceedings, 1919. We, therefore, request that legislation be enacted in order that the terms of service can be altered, abolishing the contract system, and allowing for payment to men engaged in this service an adequate remuneration and assuring them of security of service so long as they satisfactorily perform their duties.

INTERVENTION AND SELF DETERMINATION OF NATIONS

Resolutions 68, 110, 111, page 221, Congress Proceedings, 1919, voiced protest against any policy interfering with the self-determination of nations and the decision of the Congress is reported as follows:

"That this convention go on record as protesting against military intervention in countries which, after the termination of the world conflict, change the form of their social structure, and further expresses itself in favor of the self-determination of nations."

HALIFAX DISASTER RELIEF COMMISSION

Representations have been made from time to time to the Congress for further consideration of the grants made to the sufferers of the Halifax explosion. The Congress endorses these requests, which are detailed in Resolution 113, page 210, Congress Proceedings, 1919, and solicits your sympathetic consideration.

FINDINGS OF MATHERS INDUSTRIAL RELATIONS COMMISSION AND NATIONAL INDUSTRIAL CONFERENCE

We request that immediate steps be taken to bring into effect the recommendations of the majority report of the Mathers Industrial Relations Commission on subjects which we have not otherwise presented to you, and we would also ask that the recommendations made by the National Industrial Conference on the above subjects should be given full consideration and immediate action taken to bring them into effect. (Resolution 36, page 211, Congress Proceedings, 1919.)

PENALTY FOR FAIR WAGE CLAUSE VIOLATIONS

We reiterate our previous request that the Fair Wage Clause should be amended to provide penalties against contractors wilfully violating fair wage clauses.

CIVIL SERVANTS' BONUS AND EQUALITY OF PAY

Objection is taken to the method of distribution of the bonus by the Civil Service Commission and demands made that men and women doing equal work should receive equal salary and bonus. (Resolution 24, page 189, Congress Proceedings, 1919.)

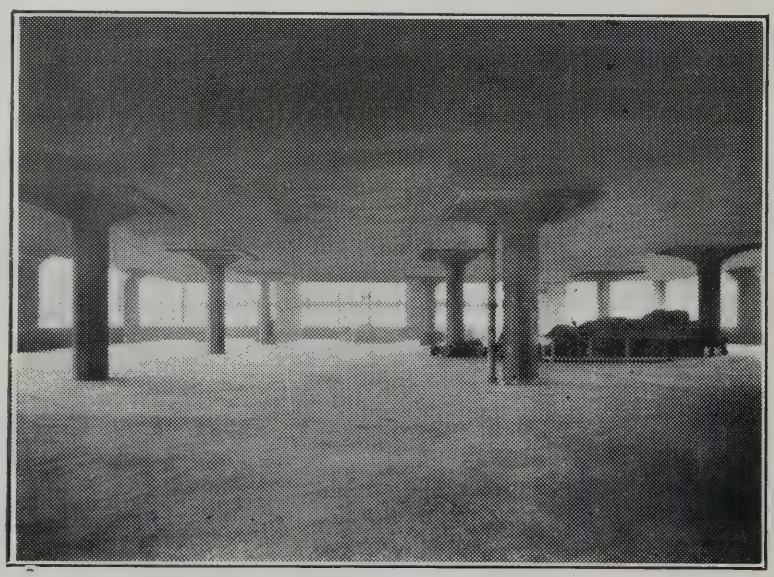
SOREL SHIP YARDS

Resolution 79, page 214, Congress Proceedings, 1919, incorporates a request that the Government consider the advisability of increasing the work done in these yards, so as to cope with the unemployment situation.

AGE LIMIT OF NATIONAL RAILWAYS

It has been reported to the Trades and Labor Congress that the management of the Canadian National Railways

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have adopted a policy of refusing to employ men who have reached the age of forty-five. Strong protest is entered against such policy being adopted and a declaration by the Government sought on this question. The text of this protest is found in Resolution 51, page 124, and committee's report, page 214, Congress Proceedings, 1919.

CUSTOMS TARIFF ON PATTERNS

Stricter enforcement of the tariff regulations regarding patterns coming into Canada is requested, and additional regulations sought which will prevent patterns being admitted into this country free of duty, by being classed as models, and also would make the import duty applicable to all molders; patterns and core boxes for same, therefore keeping the pattern-makers of Canada more employed. (Resolution 35, page 125, Congress Proceedings, 1919.)

PROTECTION OF CAR BUILDERS AND REPAIRERS

This request for the erection of suitable buildings to protect men engaged in the above-mentioned work has been previously presented and is reiterated in Resolution 58, page 124, Congress Proceedings, 1919.

The Government's Reply

The written reply of the Government to the foregoing representations took the form of a letter from the Acting Prime Minister to the Secretary of the Trades and Labor Congress, as follows:

Prime Minister's Office,
Ottawa, Ont., March 4th, 1920.

Dear Sir—

The subjects presented to the Government by a delegation representing the Trades and Labor Congress of Canada, a short time ago, have been carefully reviewed. It is not usual to make an official reply to submissions of this nature, further than to promise consideration of the questions submitted. Without establishing any precedent, I am in this case briefly expressing the Government's views on the various subjects you have submitted for its consideration.

The permanent military forces have not been increased from five to ten thousand, as you intimate. Parliament authorized an increase to ten thousand, should necessity require, which I think was a wise precaution. The present establishment is less than five thousand men, the authorized pre-war basis. The Royal Canadian Mounted Police Force is not up to its authorized strength of 2,500 men, even including the Dominion Police, which have been absorbed into it, and both forces have been brought under one administrative head, which will promote both efficiency and economy in this service. Estimates for the maintenance of these forces will necessarily show some increase because of the increased rates of pay.

The Orders-in-Council to which you allude were purely war measures to restrain aliens and others from conduct the effect of which would have tended to curtail and retard Canada's war effort. No loyal citizen had anything to fear from them and a number of these orders were distinctly favorable to labor interests. Your observations regarding possible misinterpretations or misapplication of the amended Criminal Code are noted. The law, in my opinion, is not susceptible of the interpretation complained of, nor has it been so judicially interpreted.

With regard to immigration, the Government has already adopted the principle of careful selection of all immigrants, and the number of rejections and deportations reported for the current year is a clear indication of the care being exercised in carrying out the policy.

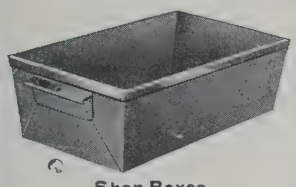
Your suggestion for representation on a Central Empire Board to deal with problems of immigration will not be lost sight of should such a board be created.

Your further suggestion respecting Oriental immigration and certain deportation provisions of the existing Immigration Act will be carefully considered with a view to determining what action, if any, should be taken in the general national interest.

The Government will also make further inquiry with a view to assisting Canadian theatrical mechanics in the direction intimated.

In regard to the right of organization, the Government has clearly stated its policy in this connection, so far as industrial workers are concerned. But employees in the

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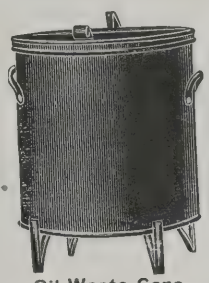


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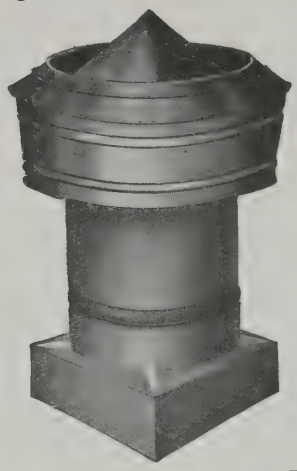
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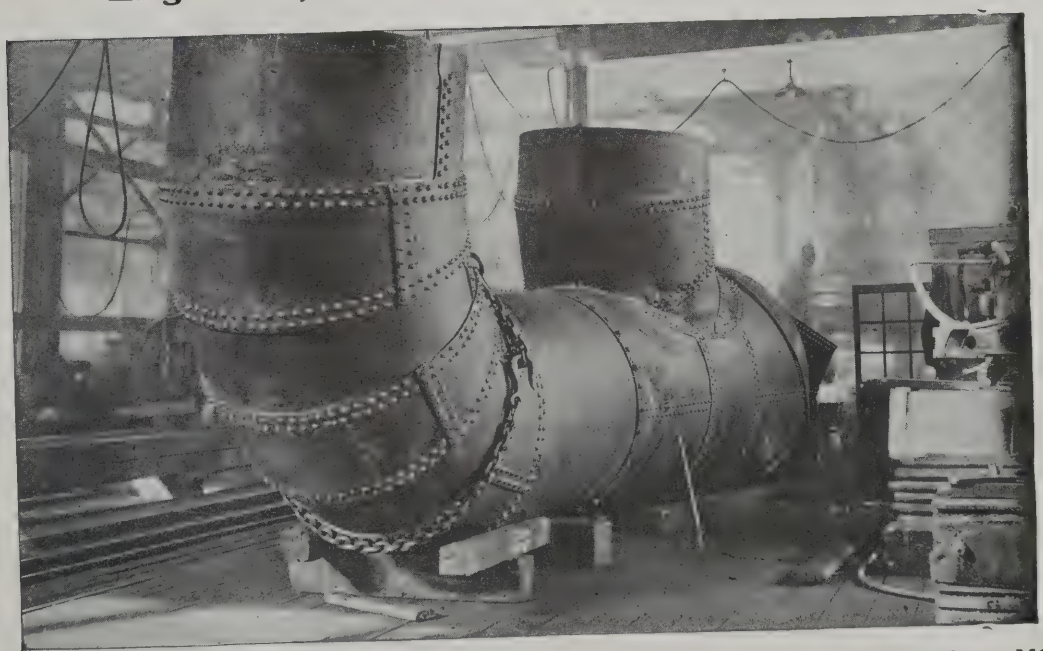
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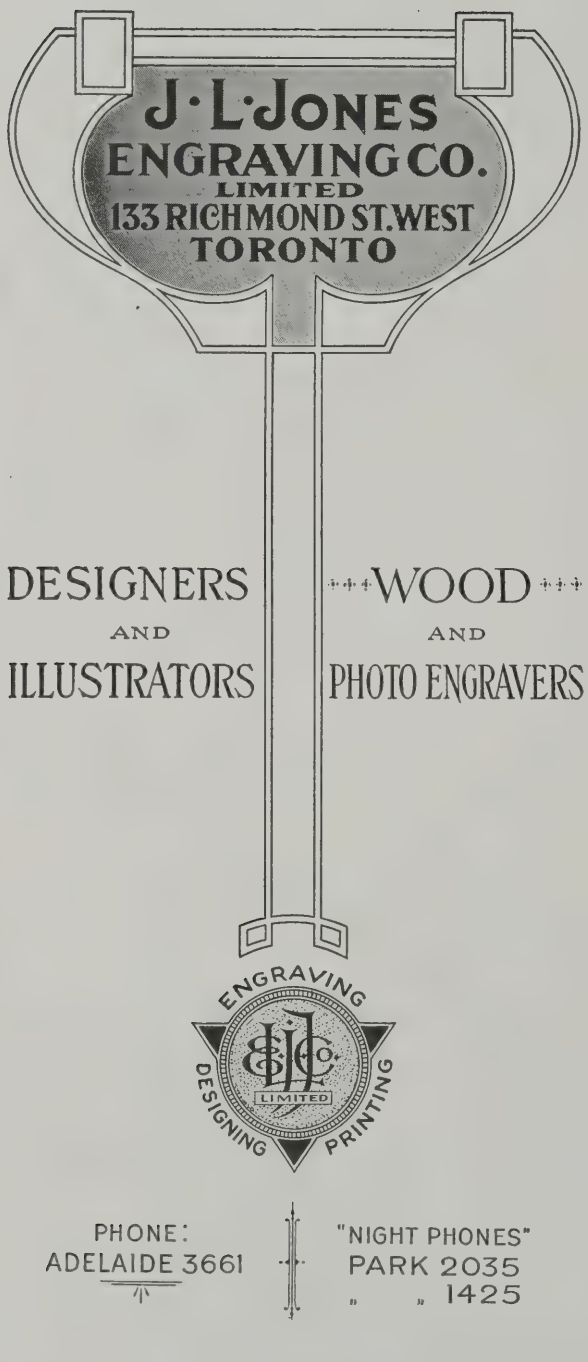
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service of the Federal Government are in a different category, inasmuch as there is no incentive from the standpoint of money profit to cause the employer, which in each case is the public, to impose unfair or onerous working conditions or rates of pay. Parliament representing all the people, labor included, has as well made provision for the fair determination of any grievances complained of. It cannot be conceded that public service employees shall be subject to control of any organization or federation of industrial workers, and become thereby liable to be involved in industrial disputes. In the administration of the Department of Labor, the Minister of that Department has on more than one occasion recognized the wisdom, on the part of both employers and employees, whether individual cases or as groups within a given industry, of meeting together and negotiating with a view to the settlement of differences existing between them.

Attitude on 8-Hour Day

As you are aware, the Peace Treaty, the terms of which the Parliament of Canada has already approved, together with the action of the Labor Conference at Washington, recommends the adoption internationally of a forty-eight-hour week or an eight-hour day. It is our firm purpose to give loyal adhesion to the terms so agreed upon. The necessity in this connection of having regard to the progress made by other countries must be apparent to all. The further question as to whether the necessary legislation is within the jurisdiction of the Federal Parliament of Canada, or of the Provincial Legislatures, is now being investigated with a view of reaching an understanding with the provinces on the subject.

The Government is glad to know that the legislation passed respecting technical education is endorsed by labor.

Referring to suggested co-operative legislation, I may say that any proposed legislation to enable workmen to buy co-operatively will receive careful attention.

In connection with the observations of your delegations respecting the registration of union labels, if you will be good enough to state generally the terms of such legislation as, in your opinion, would meet the need, the Government will be glad to give it consideration. Page 127, Congress Proceedings, gives no information on the subject.

Concerning the revision of the Industrial Disputes Act, the Minister of Labor, at our conference extended an invitation to the Congress Executive to submit its proposals in concrete form. Some amendments to the Act are under consideration by the Department of Labor and any suggestions you may desire to make will be gladly received.

Your representations respecting health regulations for painters will be referred to and inquired into by the Department of Health.

The matter of proportional representation and other amendments to the Election Act are being considered by the Federal Government, as intimated by the Prime Minister in 1919. To make election days holidays would entail great loss to the country in production and a heavy loss in wages to the workers; consideration, will, however, be given to your proposal to extend the closing hour of polls.

The Federal Government has made substantial provision for aiding the provinces in improving housing conditions.

Rural mail carriers are engaged by tender and contract. There is no present intention of bringing them within the Civil Service, as such action would clearly not be in the public interest.

Findings of Mathers Commission

Consideration is being given to the findings of the Mathers Industrial Relations Commission; also of the National Industrial Conference.

Your request concerning an amendment to the Fair Wage Clause in Government contracts is noted and the Government would be pleased to have your Executive submit its specific proposals in this connection.

As to civil servants' bonus and equality of pay, the government does not agree with your observations concerning alleged inequality in distribution of bonus to civil servants. It does agree that equal salary for equal work should be paid civil servants. It does not agree that a bonus designed to aid its employees over an emergency period should be based on the same principle. Employees with dependents needed and re-

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ceived more substantial aid than others who had only themselves to support.

Respecting the Sorel shipyards, no representations have been made to the Government indicating any abnormal unemployment situation in Sorel. The Minister of Marine will be asked to report on the question of prospective work for Sorel yards.

Referring to the question of age limit on National Railways, there is no age limit prescribed by law regulating the employment of railway employees. The Canadian National Railways are being operated under a corporate management, who bear the same responsibility towards the employees as is the case on privately owned lines. The Government has declined to interfere in any way with the details of operation as regards the employment of men or discipline, but hold the management responsible for efficient service.

The railway employees are largely organized, and have their duly elected representatives to present their requests to the officials. There would seem, therefore, to be no necessity for legislation on the subject named. If an altered regulation is desired by the employees, they should first submit their request to the management for adjustment by negotiation.

Referring to customs tariff on patterns, the Ministers of Customs and Finance are inquiring into the question of importation of patterns duty free, as models, and will act according to the nature of the information received.

The question of protection of car builders and repairers would seem to be a matter proper to be taken up with the railway managements. If the railways have been approached and have declined consideration of your request, it would seem then to be a matter within the jurisdiction of the Board of Railway Commissioners, who give attention to the equipment and appliances necessary for the safety of the employees.

Your views on the Welland Canal question will receive due consideration.

The Prime Minister recently made a pronouncement on the subject of representation on National Boards of Railway Directors, which, I think, constitutes a satisfactory answer to your representations.

Yours very truly,

GEORGE E. FOSTER,
Acting Prime Minister.

P. M. DRAPER, ESQ.,
Secretary, Trades and Labor Congress of Canada, Ottawa.

Assisting Industry

Provincial Government of British Columbia has a Department to Help in Establishing New Industries

During 1919 the British Columbia Government established a Department of Industries for the purpose of investigating industries in need of financial assistance, and for the making of loans to such concerns when the project was considered feasible and the promoters deserving. Major D. B. Martyn, D.S.O., M.C., was appointed by the Government as Industrial Commissioner to administer the new department.

The first report of the Department of Industries has just been made public, and this report shows that a total of 222 applications have been made to the department for assistance, and of these applications 19 have received assistance; the loans varying, in individual cases, from $500 to $200,000, the latter sum having been loaned to the Canada Western Cordage Company, a concern promoted and managed entirely by returned soldiers, and which is now building a plant at New Westminster for the manufacture of rope. Other industries which have been assisted include one toy factory, two furniture factories, and a returned soldiers' canning company. The majority of concerns which have received assistance are managed or promoted by returned men.

The Department of Industries is also doing a good work in making known abroad, principally in the British Isles, the industrial requirements and openings in this province.

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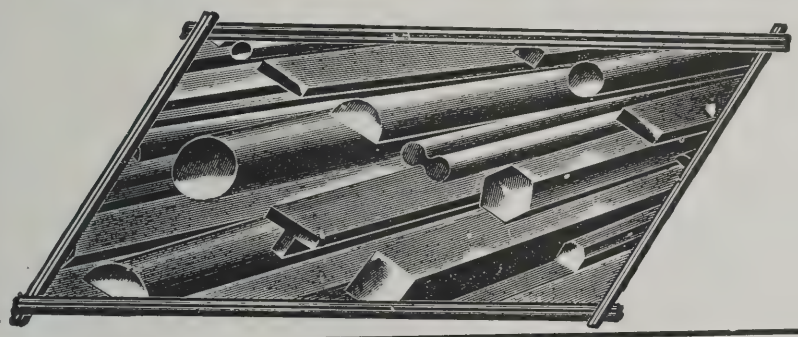
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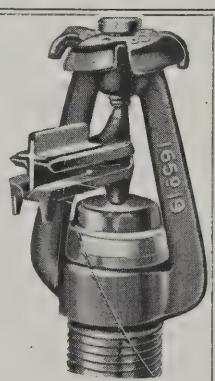
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Lumbering in British Columbia

(*Continued from page 75.*)

is estimated to be $200,000,000. This is largely controlled by investors in Eastern Canada, Great Britain and United States.

The prices for lumber since the war have been abnormally high, but despite this, the demand has been strong, and mill operators of British Columbia were able to take advantage and profit from the premium on the United States dollar, exporting large quantities of lumber across the boundary line. On the other hand American investors took the opportunity offered by the exchange rate to make extensive purchases of timber limits.

The prospects for the future of the pulp and paper industry are unusually bright. The Oriental market is increasing rapidly, while Australia is a customer of increasing importance.

The paper shortage, not only in Eastern Canada, but in Europe, is bringing more forcibly than ever the great wealth of British Columbia pulp woods before capitalists and manufacturers. Recently representatives of British newspapers came west to survey the prospects for the establishment of paper mills to insure an adequate supply of newsprint for the journals they represented. It is confidently expected that within the next two or three years additional mills will be in operation. Water power for such plants is available on numerous streams close to the spruce limits of the coast.

In 1901, the Provincial Government as an encouragement to the industry, granted 2-year leases of pulp wood areas to bona fide applicants on generous terms, and as a result several companies were formed to start operations. They selected 354,399 acres. The conditions attached to the leases were that mills should be equipped and operated in the Province with a daily output of not less than one ton of pulp or half a ton of paper for every square mile included in the lease. The merchantable timber on these leases may be cut and manufactured under special timber leases. The rental in these regulations is two cents an acre and a royalty of 25 cents a cord on the pulpwood cut. This law was repealed in 1903.

The Mining Industry of British Columbia

(*Continued from page 79.*)

than 2,000,000 pounds monthly. Actual ore blocked out on these properties are in excess of 9,000,000 tons, while "possible and probable" tonnage has not yet been computed. It has been definitely established, however, that the ore reserves of this great property will guarantee a production of 3,000 tons daily for the next thirty or forty years—and from that on, indefinitely.

The Britannia Mine is another instance of the reward of enterprise. This mining camp was about to be deserted in 1911, when the late Mr. Grant B. Schley, of New York, took a chance on it, and by progressive methods firmly established it as the premier mine of its kind in the empire.

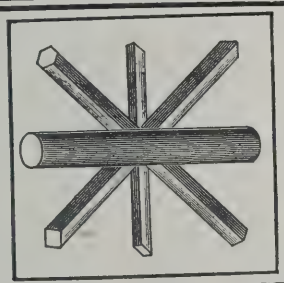
The Canada Copper Corporation at Copper Mountain, near Princeton, in the Similkameen Valley, is another low grade copper property with immense reserves which have been proven capable of maintaining production over a long term of years. Construction and development work are being rapidly pushed ahead on this property. Last year a concentrating mill was built at Allenby, where the ores from the mountain property will be treated.

It would be an impossibility in limited space to even briefly touch upon the outlook for the hundreds of mining



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2 ¼ hp. Peerless ball-bearing, split phase, 110 volt, new.
1 2 hp. Peerless ball-bearing, split phase, 110 volt, new.
4 1 hp. Peerless ball-bearing, split phase, 110 volt, new.
4 ⅛ hp. C.G.E. Westinghouse, 110 volt, 1800 rev.
3 ½ hp. T.H.E., 110 volt, 1200 rev.
2 ½ hp. Menominee, 110 volt, 1800 rev., new.
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1 2 hp. Century, 110/220 volt, 1500 rev.
1 1 hp. Peerless, 110/220 volt, 1500 rev.

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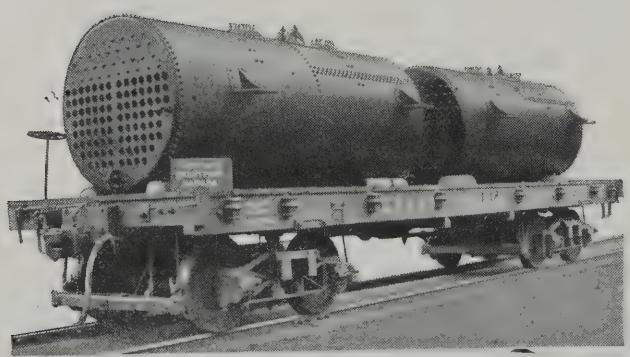
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properties in British Columbia, or to review the resources of the different districts, but that the future is one filled with promise may be gathered from another reference to Government files:

"There is every reason to believe that 1920, will be most important to the Province in point of mining development."

Industrial New Westminster

(*Continued from page* 84.)

of these, with the exception of the Small-Bucklin Company, operate also shingle mills, and there is the Dominion Shingle Mill and a number of smaller plants. Across the river, on the south shore, is the plant of the Timberland Lumber Company.

Manufacturers of lumber products include the Laminated Materials Company, the B.C. Manufacturing Company, and the Lumber Products, Ltd. The first-named has just taken a lease from the city of a thousand feet of water front on which to build an additional plant, while the second is already building its new plant, to have double the capacity of its original equipment. Phenomenal success has attended the box industry, and the product of the Fraser River in this line has been shipped all over the world in competition with both European and Asiatic concerns.

The manufacture of lumber is carried to a still higher pitch by the Brooks Woodworking factory and the Westminster Furniture Company. The former makes a very high grade of wooden fittings, and the latter is engaged in turning native hardwoods into serviceable furniture for the home, an enterprisce for which there is a great field.

So much for the products of the forest. Turning to metal, the Heaps Engineering Company operates in New Westminster what is said to be the best equipped machine shop west of Winnipeg, together with an iron foundry; the Westminster Ironworks is also a machine shop and foundry, specializing to some extent in ornamental ironworks. Then there is the Westminster Foundry Company and a small plant making a high grade of tool steel, probably the only plant of its kind in Western Canada.

The smaller industries of the city are numerous and of a diversified nature. They include salmon canneries and cold storage plants, a fruit cannery, a plant for evaporating vegetables, a distillery making grain alcohol for industrial purposes, a brewery, a grain milling plant, a wooden shipyard and several smaller yards building tugboats and barges, and so forth.

At the time of writing two plants are under construction, in one of which particularly considerable interest centres. This is the plant of the Canada Western Cordage Company, which will manufacture rope, binder twine, and similar products. It is the only cordage plant in Western Canada, and in its inception met with determined opposition from interests which were obviously willing to spend considerable money to see the project die stillborn. The other plant is that of Cut-to-Fit Buildings Company. Plants of this kind have been established in the United States and Eastern Canada, and have grown to large proportions.

As for the industrial future of New Westminster, a volume might be written by anyone having a knowledge of the natural and artificial advantages of this port, and a grain of optimism in his mental make-up. The advantages are undoubted. Along both banks of the Fraser River and on the flat lands of its delta there is room for many great industries, with deep water. The river offers the advantages of cheap transportation, either for bringing in the raw material or shipping out the finished product, or both. The cargo ships of the world can come into the Fraser. Railway transporta-



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tion is also offered in no stinted fashion. The lines of four great railway systems converge on New Westminster. It is on the C.P.R., the C.N.R., the G.N.R., and the N.P.R. The electric line of the B.C.E.R. Company runs from New Westminster out through the Fraser Valley. All of these railways have interchange facilities. Much of the water front within the city is owned by the city. There is an abundance of electrical power and water. The city owns its own water system and electric light distributing plant.

The possibilities of establishing new industries in New Westminster and its immediate vicinity are manifold, and it is confidently expected that an era of industrial expansion is well within sight.

Charm of Victoria and Vancouver Island

(*Continued from page* 83.)

shingle mill. Lumbering for the Chemainus mills is carried on in the woods behind Ladysmith.

At Cassidy's or Granby, as it is called, the operating company constructed a model town for their employees. Here every convenience has been provided for the workmen, and the workers are housed in homes that are fitted in every way possible for their comfort.

South Wellington is another mining camp near Granby where there is a large production of coal, shipments being made to Boat Harbor.

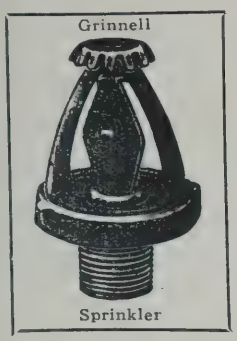
Nanaimo, where British Columbia's oldest collieries are located, is a seven mile run from South Wellington. It is a progressive city of 8,000 inhabitants, with well paved streets, modern business blocks and fine homes. Four coal mines operate here, while limber mills and herring fisheries add to the commercial activities of the city.

Nanaimo was one of the Hudson's Bay Company's first posts in the Province, and the old blockhouse built to give protection against hostile Indians is still standing in the business section of the city. Its main streets followed the walls of the stockade which at one time stood about the blockhouse, bearing testimony for all time to the hardihood and daring of the early day adventurers who established the community.

From Nanaimo, the Island Highway passed through the old Town of Wellington, abandoned by the old Wellington Collieries Company when the coal seams gave out. Passing Oarksville the road leads through a picturesque woodland to the scenic glories of Cameron Lake, a placid body of water cupped between towering mountains.

It is on the road from Cameron Lake the famous "big timber" is encountered. This stand of trees is of such magnificence that a strong public sentiment is pressing upon the Government the desirability of acquiring the tract from the private owners to be kept as a forest park. The giant trees, from six to ten feet in diameter, and towering hundreds of feet in the air, are the delight of all travellers over the highway.

Dropping down from the ridge of the centre of the island the road leads to the two towns at the head of Alberni Canal, the one bearing the name of the inlet, the other, two miles distant known as Port Alberni. This is the largest and most enterprising settlement, being an incorporated city. Fisheries and lumber mills are the principal industries. It is the trade centre for the canal, Barclay Sound, forty miles away and a considerable portion of the west coast of Vancouver Island. It is also the terminus of the branch line of the E. & N. Railway, which extends along the east side of the island, paralleling the highway which has been briefly described here.



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Deaths Among Prominent Manufacturers

Was Welfare Worker

Late Dr. Daniel Strachan, of Imperial Oil Limited, Held Important Post

Many members of the Canadian Manufacturers' Association had come to know and esteem the late Dr. D. Strachan during his brief tenure of office as head of the welfare work of Imperial Oil, Limited. For many years a clergyman in Hespeler, Brockville and Toronto, he was selected by the late Hon. W. J. Hanna to take charge of the welfare work of the big oil corporation. This brought him into touch with the C.M.A., and his voice was frequently heard at meetings and conferences, where his fine personality and bright and humorous speeches were much appreciated. His death occurred after a brief illness on March 3.

The Late G. R. Munro

Second Vice-President of Peterboro Company, had Promising Career in Prospect

Peterboro lost a good citizen in the death on March 1 last of George Reid Monro, second vice-president of the Wm. Hamilton Co., Limited, and grandson of the founder of the company. Mr. Monro was an engineer by profession and after graduation from the School of Practical Science, Toronto, was with the preliminary survey of the Hudson Bay Railway. He was later on the staff of Kerry & Chase, Toronto, returning to Peterboro in 1911 to become engineer of the Wm. Hamilton Co. He was a member of the Engineering Institute of Canada and the first president of the Peterboro Branch of that Society.

A Pioneer Manufacturer

Late Wm. H. Frost, of Smith's Falls, was Oldest Maker of Malleable Castings in Ontario

Wm. H. Frost, president of the Smith's Falls Malleable Castings Co., Limited, who died on March 18, in his 73rd year, was the oldest malleable castings manufacturer in Ontario. He started the business in 1878 in a small way, developing it into one of the largest industries of its kind in the province. Two brothers, deceased, were heads of the Frost & Wood Co., and the family has played a leading part in the industrial life of Smith's Falls.

Stove Manufacturer's Death

Adam Hall, President of Adam Hall, Limited, Peterboro, was Successful Business Man

The death occurred at Peterboro on March 15 of Adam Hall, president of Adam Hall, Limited, stove manufacturers. Mr. Hall, who was 74 years of age, came to Peterboro in 1878 and opened a retail stove and tinsmithing business, which he conducted successfully until 1910, when he entered the manufacturing field. The stove industry, which he built up, developed into a large and flourishing business. Mr. Hall was an active and public-spirited citizen of Peterboro and had many interests in the city. Two sons, William T. and A. L. F. Hall, are vice-president and secretary-treasurer respectively, of the company.

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EXPORT MARINE IMPORT
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British Columbia, the 1920 Convention Province — Page 69

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UNIVERSITY OF ILLINOIS
APR 1920

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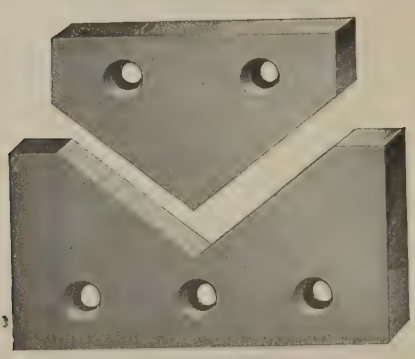


STEEL PLATE CONSTRUCTION

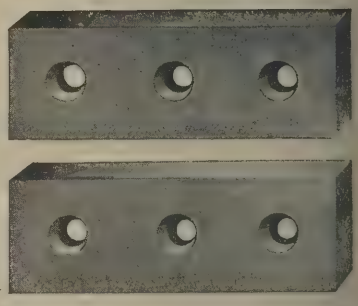
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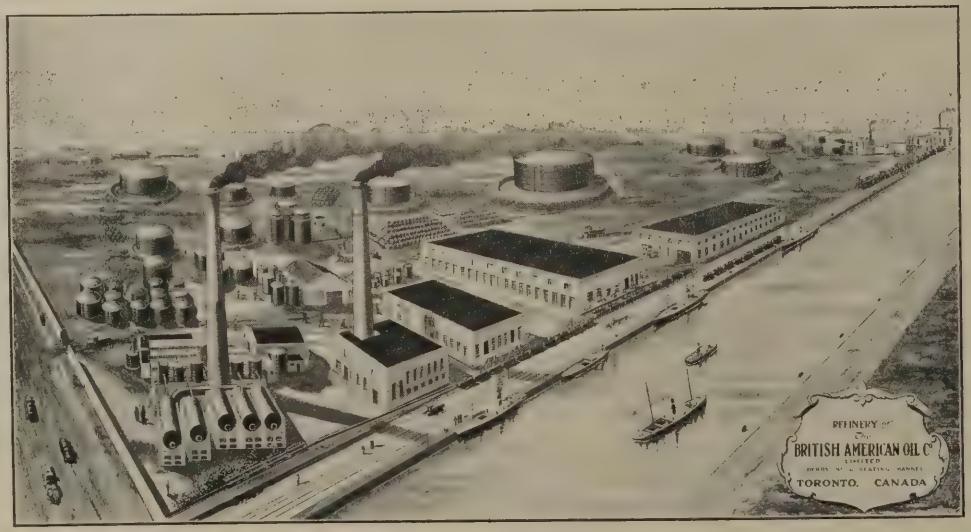
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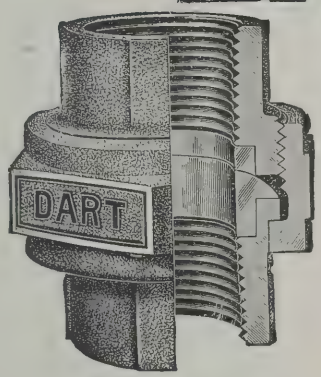
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If it's a foundation, let The Foundation Company Limited build it. The beginning of a new 10 story building for Montreal. The piers and basement excavation are being put down through soil containing a five foot layer of quicksand. All the work was done with heavy frost in the ground.

Index to Advertisements. . . . .Page 53 Contents. . . . .Page 55

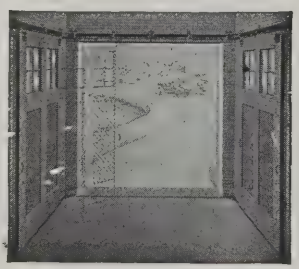


BULLDOG STEEL JOIST HANGERS

They never let go! Stronger than malleable. All sizes and styles for all kinds of work. Save space and time in erection.

GARAGE DOOR HARDWARE OF ALL KINDS FOR ANY PURPOSE

Angle Doors, Parallel Doors, etc. Special jobs receive the prompt attention of our engineering department. Let us know your requirements.





Put Your Trucks on The Ceiling!

The Modern Method of Factory Transportation

A Richards-Wilcox Carrier System---either I-Beam or Trolley---will pay for itself in one year on actual pay-roll saving, not to mention the increased efficiency. Occupies no floor space. Always ready for use. Operates easily, one man can handle 2,500 lbs. Trolley carriers made in sixteen styles and sizes for loads up to 2,500 lbs. For heavier loads use I-Beam Equipment.

Catalogs Upon Request

Richards-Wilcox Canadian Co. Ltd.

AURORA BOSTON NEW YORK CHICAGO — London Ontario — PHILADELPHIA MINNEAPOLIS SAN. FRANCISCO ST. LOUIS

"A hanger for any door that slides"

"R-W" TROLLEYS ARE BEST FOR ALL SLIDING DOORS



Specified by leading architects and engineers throughout Canada and the United States. "A hanger for any door that slides."

FIRE DOORS AND FIRE DOOR HARDWARE WITH UNDERWRITERS' LABEL

All styles, single or double, sliding or swinging. A fire door with labeled hardware is the surest way to prevent fire from spreading.



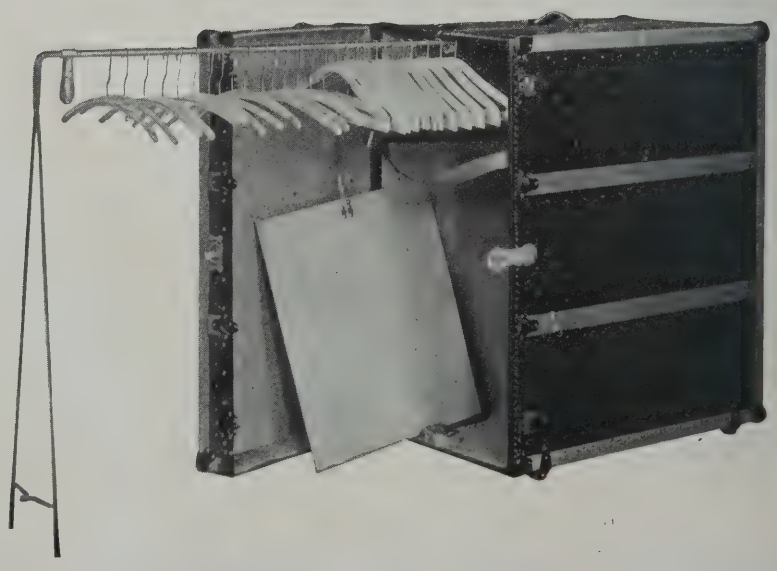
SHOW YOUR SAMPLES UNWRINKLED

WARDROBE TRUNKS

for Suits, Coats, Dresses and Waists

WE MAKE
SAMPLE TRUNKS
AND CASES
FOR EVERY
BUSINESS

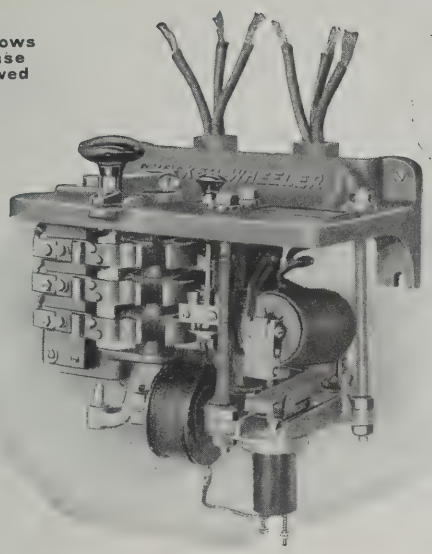
Let us know your needs and get our prices.



The M. Langmuir Mfg. Co. of Toronto
Limited

Show This to Your Electrical Friend—

Cut shows oil case removed



HEAR HIM ENDORSE OUR CLAIMS FOR THIS CANADIAN CROCKER-WHEELER TYPE D.O. OIL SWITCH AS A LIFE SAVER FOR HARD WORKED MOTORS.

HERE ARE ITS VALUABLE FEATURES: COMPLETELY OIL IMMERSED, NO-VOLTAGE RELEASE ATTACHMENT, OVERLOAD RELAY PROTECTION ON ALL PHASES, OVERLOAD ADJUSTMENT, TIME LIMIT ADJUSTMENT, ARRANGED FOR CONDUIT WIRING.

OUR APPARATUS AND SERVICE NOW AVAILABLE AT

Northern Electric Company
LIMITED

Montreal Halifax Ottawa Toronto London
Winnipeg Regina Calgary Vancouver

THE CANADIAN
CROCKER-WHEELER COMPANY
LIMITED
Manufacturers and Electrical Engineers

Head Office and Works
ST. CATHARINES, ONT.

District Offices:
TORONTO and MONTREAL

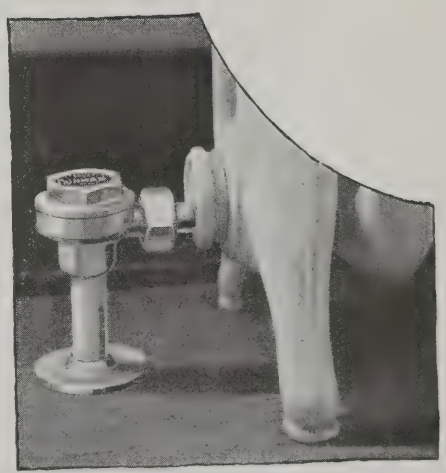
The Trap That Keeps the Radiator Hot

Any kind of a boiler will shove the steam up to a radiator. But it takes a mighty good trap to let all the air and water out without letting steam into the return line.

The Dunham Trap has been doing it since 1903—and doing it so well that you don't see many old-style traps nowadays. Everybody is busy pushing thermostatic disc traps. But do not forget that the Dunham was the FIRST radiator trap of this type.

The ***first*** of its kind—and the ***best*** of its kind according to many, many engineers, and to architects and heating contractors who know that quality counts above all else.

Our new booklet, "Data on Dunham Heating" tells some heating facts in an interesting way. May we send you a copy?



The Dunham Radiator Trap

The DUNHAM HEATING SERVICE

Made in Canada

C. A. Dunham Company, Limited, Toronto, Ontario

Halifax Vancouver Winnipeg Ottawa Montreal Calgary

London: 64 Regent House, Regent Street, W 1

STAYBOLT TAPS



The Better the Man, the More He Appreciates Them—

Not only good when new, but heat treated and seasoned to maintain this goodness. Can be ground on face of cutting edge without affecting their size. That's why you'll find Pratt and Whitney Stay Bolt Taps on the job long after cheaper "just as good" tools are buried in the scrap pile.

Threads accurately and cleanly cut, with the least expenditure of time and effort, are favorites in the shop.

If you've used them before, you know just how good they are. If you haven't, send us your first order—we know you'll be back for more. They're carried in stock in our sales rooms in all large cities.

PRATT & WHITNEY CO.
OF CANADA, LIMITED
***Works:* DUNDAS, Ontario**

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723 Drummond Bldg.
TORONTO
1002 C.P.R. Bldg
WINNIPEG
1205 McArthur Bldg.
HALIFAX
Davidson Bldg.
VANCOUVER
B.C. Equipment Co

OFFICES AND AGENCIES CARRYING PRATT AND WHITNEY SMALL TOOLS IN STOCK

New York: 326 Hudson St. Boston: 93-95 Oliver St. Philadelphia: 405 N. 21st St. Cleveland: 730 Superior Ave. Detroit: Kerr Bldg. Chicago: 571 W. Washington Blvd. St. Louis: 516 N. 3rd St. Cincinnati: 338 W. 4th St. Birmingham, Ala.: 2015 First Ave. San Francisco: 16 to 18 Fremont St. New Orleans, La.: C. T. Patterson Co., Ltd. St. Paul, Minn.: Robinson, Cary & Sands Co. Denver, Colo.: Hendrie & Bolthoff Mfg. and Supply Co. Canada: Pratt and Whitney Co. of Canada, Ltd., Dundas, Montreal, Toronto, Winnipeg and Vancouver.

PRATT AND WHITNEY

The BERTRAM Page

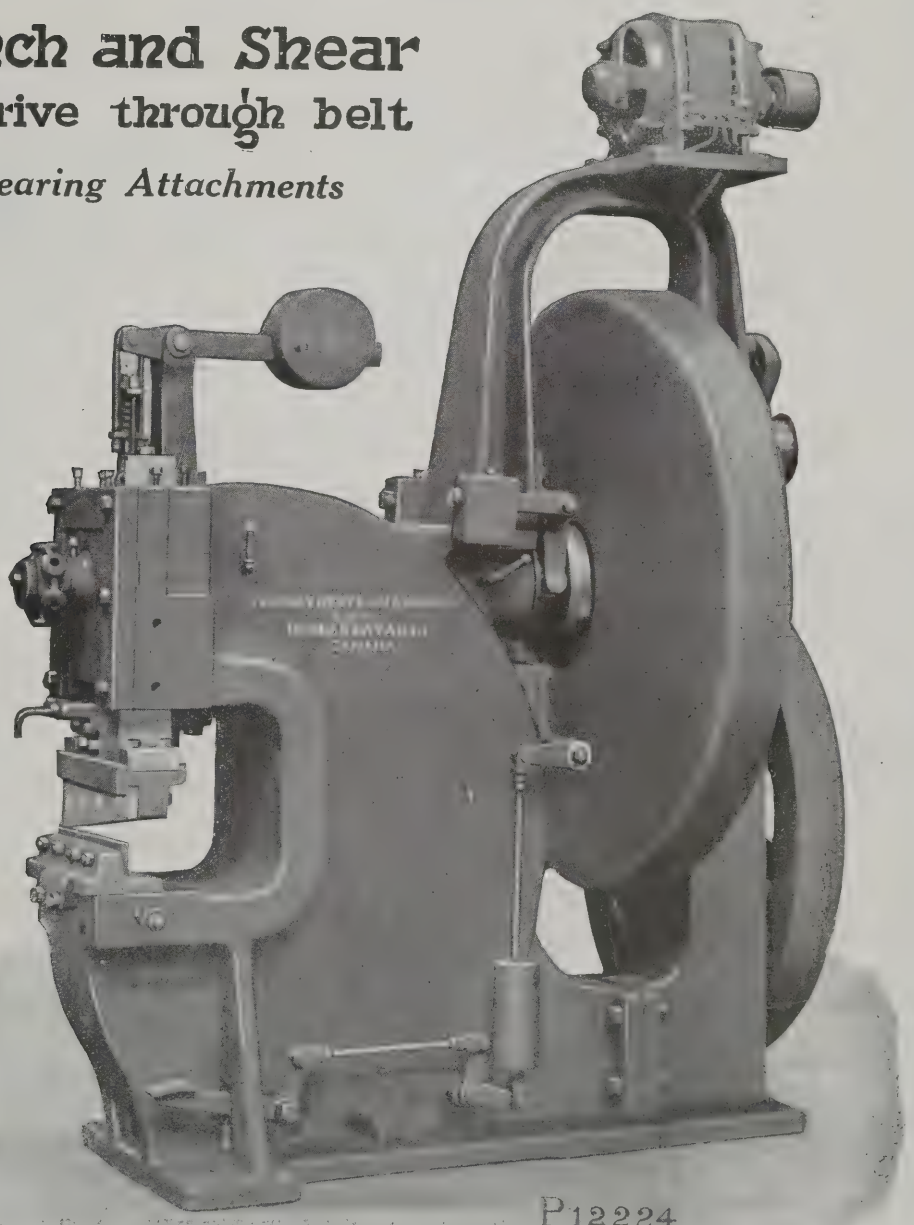
MACHINE TOOLS

JB&SCo

No.4 Single Punch and Shear

12" Throat Motor Drive through belt

Fitted with Plate Shearing Attachments



P12224

Capacity

To punch 1" hole through 1" Plate
To shear 1" Plates
To " 6"x1" Flat Bars
To " 1¾" Round Bars
To " 4x4x⅜" Angles

The John Bertram & Sons Co., Limited
DUNDAS. ONTARIO.

MONTREAL
723 Drummond Bldg.

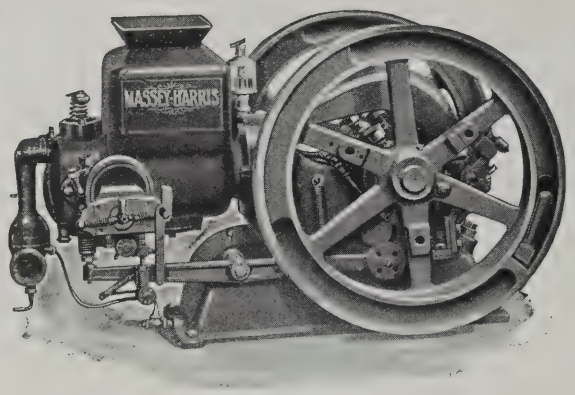
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1002 C.P.R. Bldg.

VANCOUVER
609 Bank of Ottawa Bldg.

WINNIPEG
1205 McArthur Bldg.

HALIFAX
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Massey-Harris



An Engine You Can Depend On

The Massey-Harris Engine can be depended on to give all the year 'round service in any kind of weather at minimum cost, because it's designed on scientific principles and every part built to stand up and wear long.

Think what these features mean:

Simple in operation.

A Simple and Efficient Carburetor gives a perfect mixture in any kind of weather.

Effective Governor—No charge or spark on Idle Stroke.

Valves Easily Removable.

Large Water Space surrounding Cylinder.

Safe Gasoline Storage in the substantial Cast-Iron Base.

Write for more detailed description of the Massey-Harris Gasoline Engine.

Made in Sizes to deliver from 2 to 15 H.P.

MASSEY-HARRIS CO., Limited

Head Office—Toronto, Canada

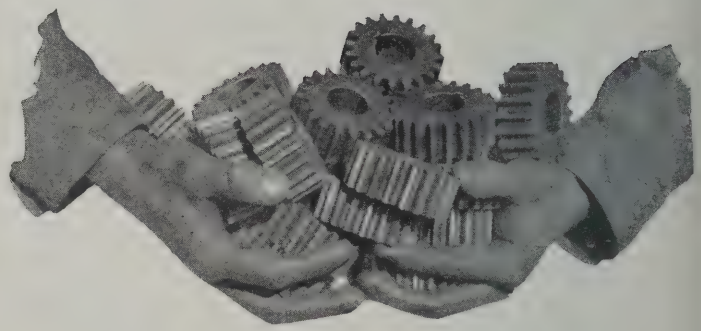
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Swift Current Yorkton Calgary Edmonton

AGENCIES EVERYWHERE

CUT GEARS

For Delivery



of Good Gears

Write Us

Hamilton Gear Co. Ltd.

Van Horne St. - TORONTO

Efficient Transfer Cases

Do you ever send your stenographer or secretary to find some last year's correspondence and have her, in turn, get the office boy and wade through the old type of filing case? Perhaps they have to lift down several cases to get at the right one—and in the meantime you wait. With the

MEADOWS STEEL TRANSFER CASE

you have no such trouble, no waits. Your last year's correspondence is ***just as accessible as your daily mail of this season.***



There is only the first cost. Meadows Steel Transfer Cases will not wear out or break under every day working conditions. They will stand an unusual amount of rough handling. Best of all they are the efficient case—dustproof, fireproof.

You can buy one Meadows Transfer Case and add more as you need them. They interlock, one above the other, to any height desired. They are sturdily built, are free running and take up little floor space.

VERY COMPACT

The frame is constructed of flat steel bars, welded to withstand any unusual strain. Note the measurements and compare with other makes.

INTERLOCK WITHOUT BOLTS

Meadows Steel Transfer Cases interlock without the use of bolts. A notch in the back leg of each case hooks into the one below and prevents the case from tipping when the drawer is pulled out. This gives a rigid construction to the stack.

LARGE SPACE FOR FILING

Each drawer has 26 inches of filing space—the most clear filing space of any case on the market. This point is well worth considering.

SPECIFICATIONS

Letter size, 12″ wide, $10\frac{3}{4}$″ high and 26″ deep. Outside measurements, $12\frac{3}{4}$″ wide, $12\frac{1}{8}$″ high and $26\frac{1}{4}$″ deep. A stack of four crated for shipment weighs 125 lbs.
Prices will be sent on receipt of information as to the quantity you can use.

THE GEO. B. MEADOWS
TORONTO WIRE, IRON & BRASS WORKS CO
LIMITED
TORONTO ---------- CANADA



Salt Plant Windsor, Ont.

The Highest Standard

When buying salt always obtain the best—salt which combines quality with purity.

WINDSOR SALT
FOR GENERAL USE

REGAL SALT
FOR TABLE USE

Windsor and Regal Salt are produced in the finest salt manufacturing plant under the British Flag. Skill in manufacture has been combined with scientific knowledge to produce salt which is unrivaled.

Made in Canada by

THE CANADIAN SALT CO., LIMITED

Windsor, Ontario



Chemical Plant Sandwich, Ont.

Wire Cloth

of every description

We make Wire Rope and Perforated Metals for all purposes.
Machinery Guards of all kinds.
Metal Lockers for Clothes
Drop a line for full details.

CANADA WIRE & IRON GOODS CO.
HAMILTON ONTARIO
Eas ern Representative:
H. O. Bull, 184 Mance St.
Montreal. P.Q.



The Master Metal

STELLITE

Not Steel—But its Master

A WORD TO MANUFACTURERS

Maximum production is the aim of all manufacturers of to-day. Owing to the high cost of raw materials the manufacturer must produce to the capacity of his plant to keep his product on the market, and without Stellite tools this means a continual struggle.

With Stellite tools you can increase your production from 30% to 50% without increasing your overhead expenses. Think what this means to-day.

Write at once for a demonstration and be convinced.

Deloro Smelting & Refining Company, Limited

Head Office and Works
DELORO - - - ONT.

Branch Warehouses
200 King St. West, Toronto, Canada
174 Corporation St., Birmingham, England

The Master Metal

16" Lathe with Quick Change Gears

If you are considering the purchase of a Lathe, you should investigate the C.M.C. The Lathe that will stand the strain of severe service; that is heavy and substantial; that is accurate and will prove itself so; that is convenient to operate; that will come through with reserve power when occasion demands.

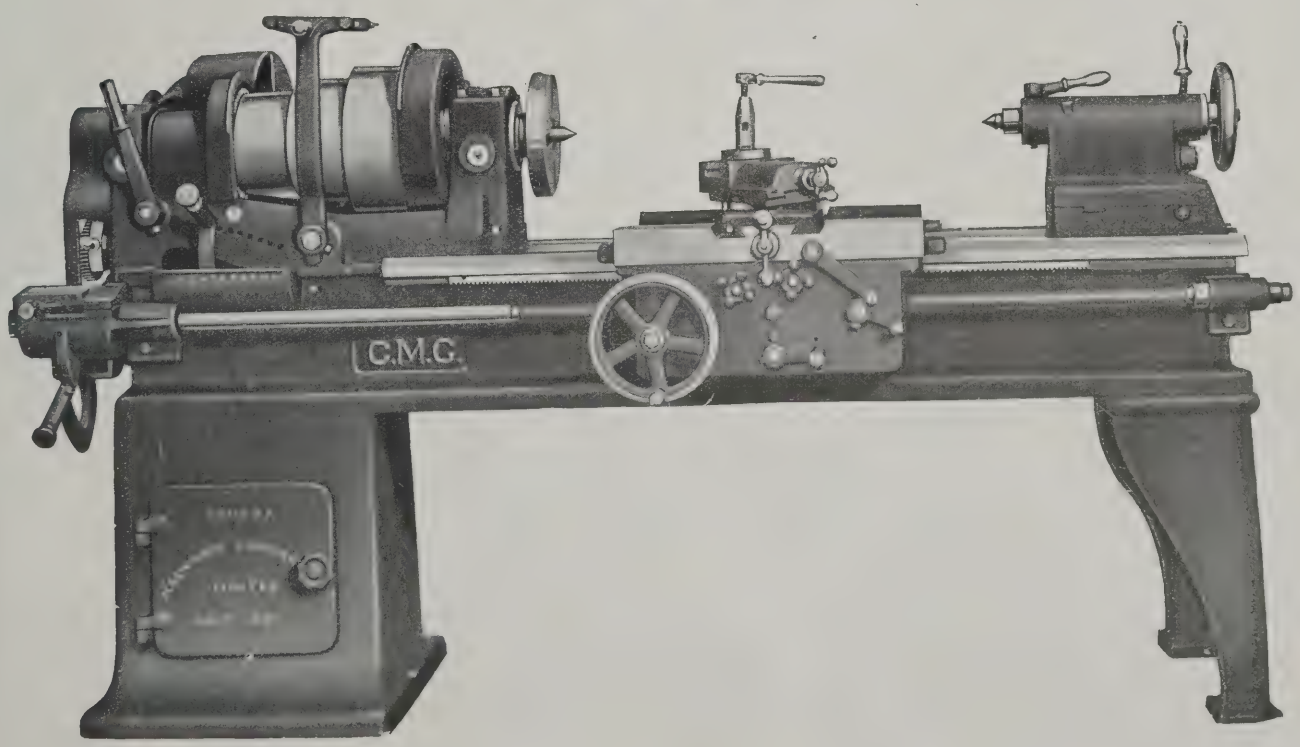
WRITE FOR FURTHER DETAILS

CANADA MACHINERY CORPORATION
LIMITED

GALT ONTARIO

TORONTO OFFICE AND WAREROOMS: BROCK AVENUE SUBWAY

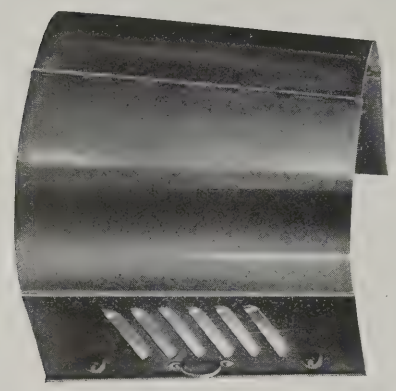
C.M.C.

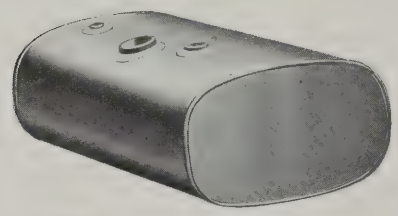


TRY THE **PEDLAR** PEOPLE LIMITED
OSHAWA, ONT.

For Everything in

STEEL STAMPINGS







NEARLY 60 years of specialized experience and a plant that has few equals on the continent for equipment, assure you exceptionally good service when you place your order with us for Steel Stampings and deep-drawn work. We can handle Stampings of every size and are particularly well-known for automobile body stampings and tank work of all descriptions.

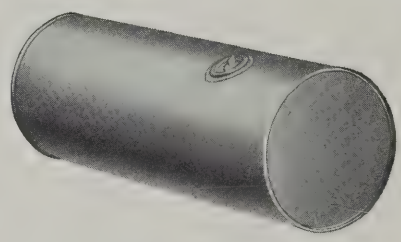
Are you using castings or forgings when perhaps a stamping would not only be more economical but would serve better?

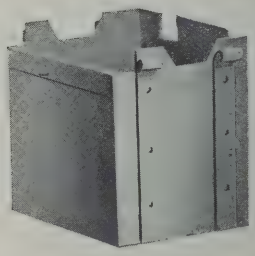
Our engineering department is at your service to help you determine where you can replace forgings or castings with steel stampings.

WE INVITE YOUR ENQUIRY

THE PEDLAR PEOPLE LIMITED
(Established 1861)

Executive Offices and Factories: OSHAWA, ONT.
Branches: Montreal, Quebec, Halifax, St. John, Ottawa, Toronto, Winnipeg, Vancouver

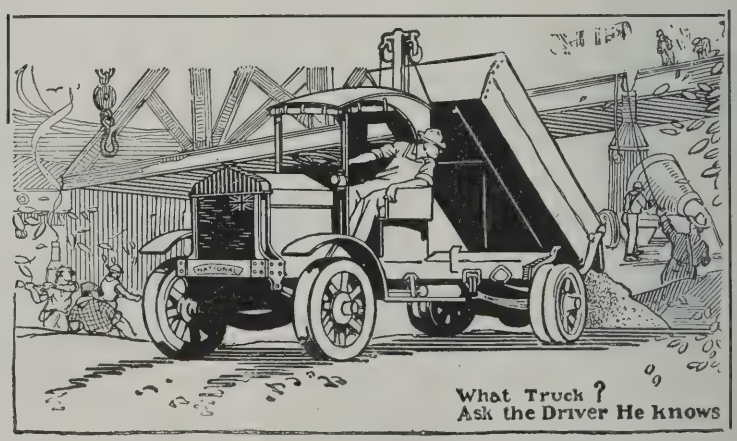




Serving Canada's Industries

EVERYWHERE you go you will find National Motor Trucks taking a big part in Canadian Industrial activity—helping Canada build and grow quickly.

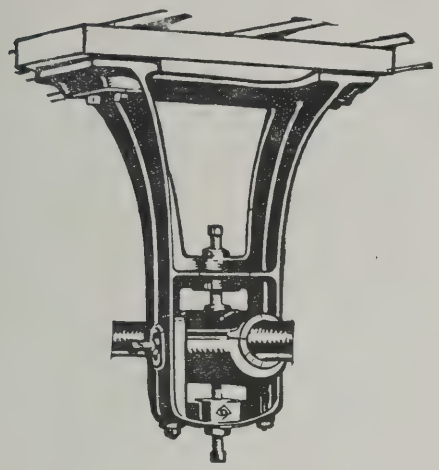
You will find them working ceaselessly for transportation companies, contractors, manufacturers, wholesalers and merchants facilitating distribution and speeding up production at minimum cost.

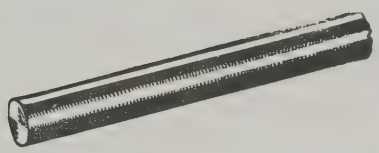


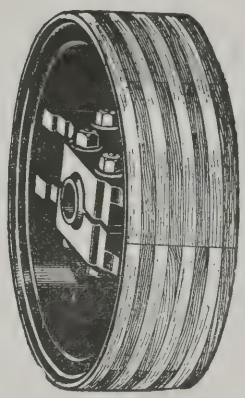
"Nationals" are preferred because of their ability to endure and to deliver peak loads on schedule time. "Nationals" offer absolutely dependable motor truck service. Convince yourself that the "National" is the truck you should buy—that it is long-lived—that it does more hard work at lower cost. Arrange now for a demonstration.

National Steel Car Corporation Limited · Hamilton, Canada

NATIONAL MOTOR TRUCKS







56 Distributors for

DODGE

Shafting Hangers Pulleys

Every considerable town has a stocker carrying a reasonable quantity of Dodge Shafting, Hangers and Pulleys.

Our factory men continuously call upon these stockers to see that stocks are kept up.

Stockers' standing instructions are that orders that cannot be filled immediately from stock must be wired to the Toronto or Montreal warehouse for shipment that same day.

We rarely fall down. As a result this very simple organization has built up a sound reputation for deliveries.

When a firm wants Transmission equipment they are usually in a mighty big hurry for it---in fact would have liked to have had it yesterday.

Therefore, we tell stockers that the one sure way to hold the good will of customers is to do the next best thing---ship the order to-day.

We advertise continuously where we have stockers so that local buyers may know who these men or firms are.

We tell you this because we want you to know the way we work so that you can call upon us with assurance when the time comes.

DODGE

MANUFACTURING CO., LIMITED

TORONTO = = = ONTARIO

Also 770 St. Paul Street West, Haymarket Square, Montreal, Que.

CANADA'S LARGEST BUILDERS OF TRANSMISSION MACHINERY

Dominion Copper Products Company, Limited

Manufacturers of

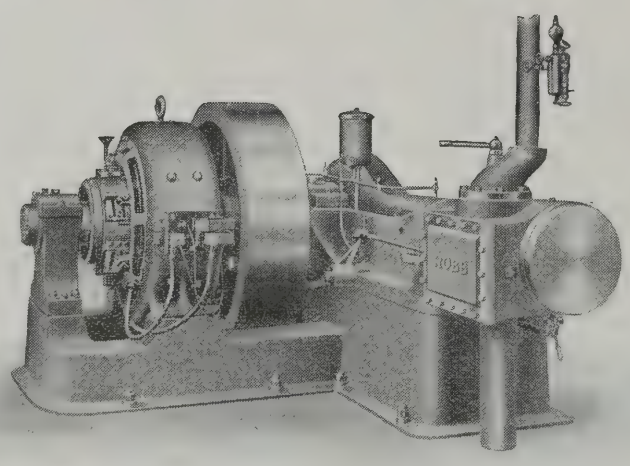
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Seamless Tubes, Sheets and Strips in all Commercial Sizes

Office and Works: LACHINE, Que., Canada

P.O. Address: MONTREAL, Que. Cable Address: "Domcopper"

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Engines

Corliss, slide valve, vertical, horizontal, simple and compound.

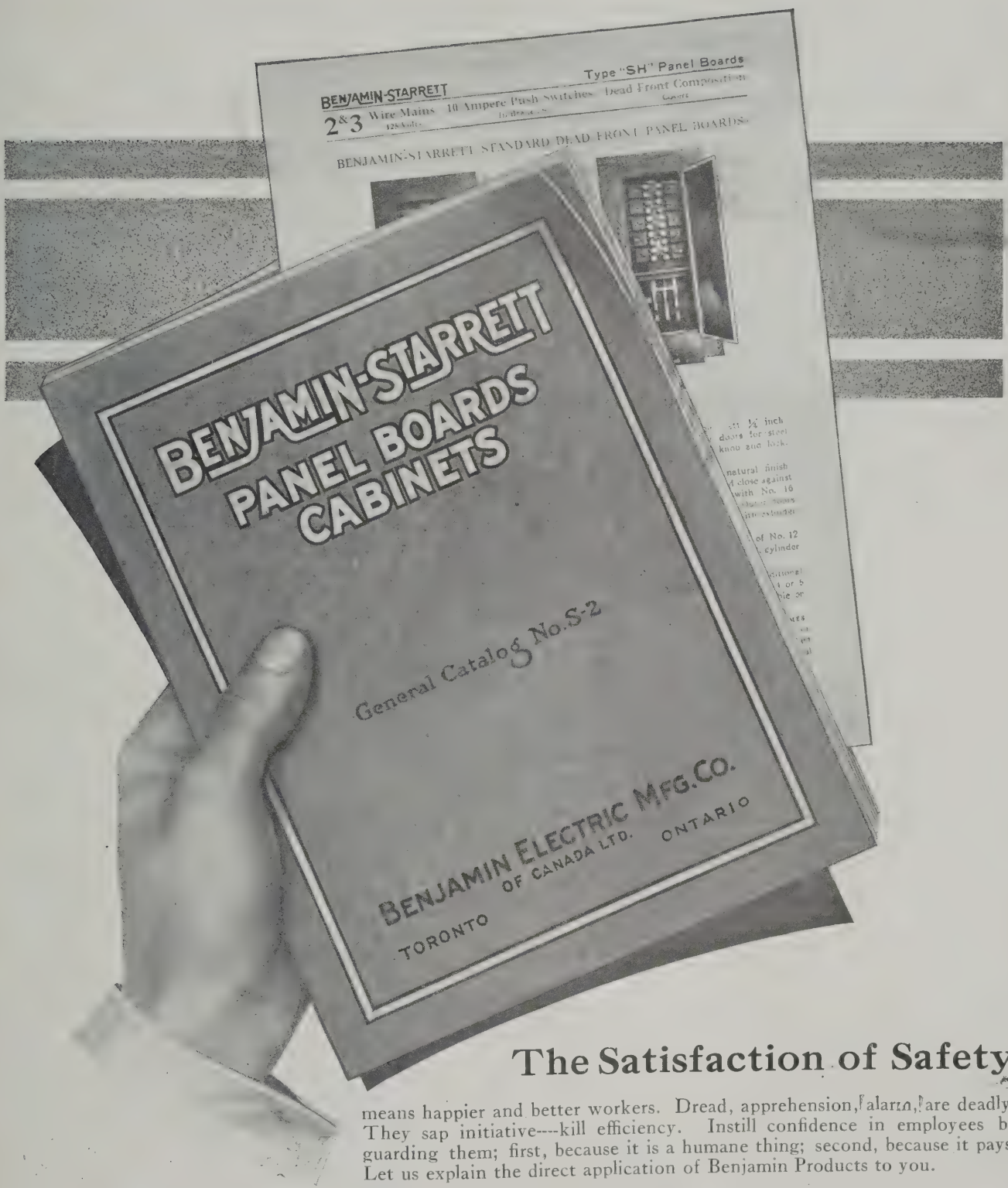
Boilers

Water tube, return tubular, improved Scotch marine and portable.

Robb Engineering Works, Limited, Amherst, N.S.

MONTREAL OFFICE
Phone Westmount 6800

TORONTO OFFICE
20 Victoria Street



The Satisfaction of Safety

means happier and better workers. Dread, apprehension, alarm, are deadly. They sap initiative---kill efficiency. Instill confidence in employees by guarding them; first, because it is a humane thing; second, because it pays. Let us explain the direct application of Benjamin Products to you.

ADDRESS

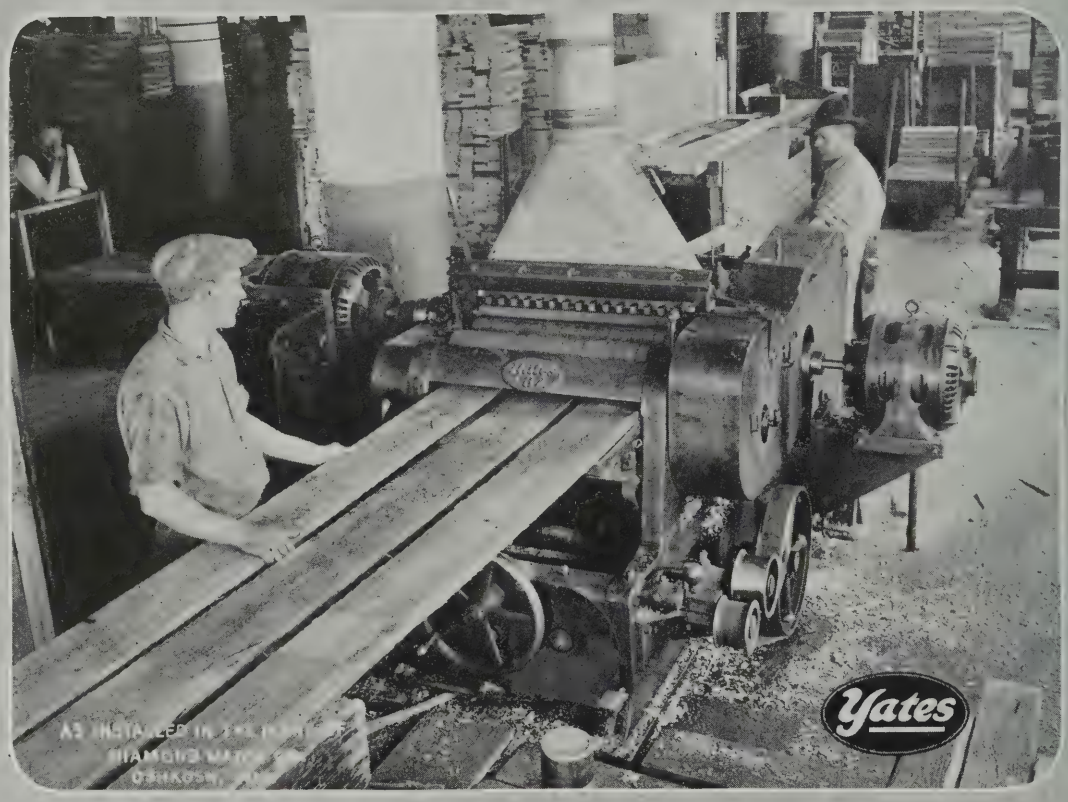
Benjamin Electric Mfg. Co. of Canada Limited

TORONTO

BENJAMIN PRODUCTS EMBRACE

Two-Way Plugs
Wiring Devices
Electrical Specialties
Weatherproof Lighting Apparatus
Gas and Vapor Proof Lighting Units
Store and Office Lighting Fixtures
Marine Lighting and Signaling Apparatus
Porcelain Enamelled Reflectors and Specialties
Industrial Signals
Automobile Specialties
Benjamin Industrial Lighting
Panel Boards and Cabinets
Punch Press Efficiency and Safety Devices
Drawings, Stampings and Spinnings in Sheet Metal
Consulting and Engineering Service

"A CLEAR BARGAIN— A DEAR FRIEND."

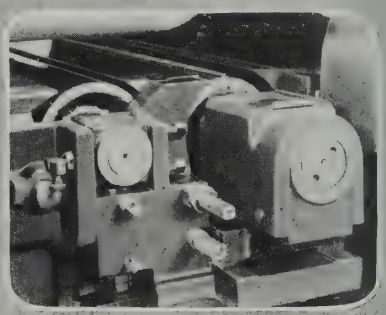


Yates type B-2 has earned its famous name by remarkable performance wherever it has been installed, not by bursts of speed for short periods, but by steady day after day production.

To learn more about this machine, write for our new illustrated circular, which will be sent free on request.

P. B. Yates Machine Co. Ltd.
HAMILTON, ONT. CANADA

United States Plant, Beloit, Wisconsin



SECTION OF B-2 SHOWING BOTTOM HEAD

"The Invariable Choice of the Man Who Knows"

If It's Rubber We Make It

Rubber has become probably the most universally used material in the world. In every factory, office, store, and household, some article of rubber is used daily as an important part of the equipment. Few users recognize its utility or its quality—to them the important item is price.

When you buy rubber goods be certain that you get a Dominion Rubber System product. It is your assurance of superior quality and satisfactory service. These products include Rubber Goods for every conceivable purpose in standard stock sizes, or specially made to meet your needs, in factory, mill, mine, lumber camp, shipbuilding, marine or other industry.

Dominion Rubber System Products

BELTING—For power transmission, conveyor, and elevator service. Bucket belts, Vanner belts, belts for brick-making machinery, lumbering, and all exposed or outside work.

HOSE—For steam, air, water, oil, acids, suction and sand—fittings and nozzles.

PACKINGS—Sheet packings and special packings for high and low pressure service, and for every other purpose.

MOULDED RUBBER—Plumbers' supplies, matting, tiling, special moulded and cut goods.

FIRE EQUIPMENT—Hose, coats, covers, reels, brass fittings, helmets, etc. Also a complete line of fire-fighting necessities for factory and home.

Our technical experts will gladly assist you, without cost, to select such equipment as you may require for regular or special service.

Phone or wire our nearest service branch.

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DOMINION RUBBER SYSTEM
AND ASSOCIATED COMPANIES

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St. John	Kitchener	Edmonton
Quebec	North Bay	Calgary
Montreal	Fort William	Lethbridge
Ottawa	Winnipeg	Vancouver
Toronto	Brandon	Victoria
Hamilton	Regina	

78



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It will keep you in touch with every phase of mechanical equipment, no matter what your business may be. It will keep before you the advantages of concentrating your buying in one place, where everything mechanical needed for the factory, power house, machine shop, garage or farm is obtainable.

It should be permanently on the desk of every purchasing agent—every buyer of mechanical goods.

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General Catalogue No. 20

the most complete compilation of information for the Canadian buyer of mechanical goods, departmentalized, conveniently thumb-indexed, and cloth bound.

The Canadian Fairbanks-Morse Co., Limited

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HAMILTON WINDSOR WINNIPEG SASKATOON REGINA
CALGARY VANCOUVER VICTORIA

Scales Valves Steam Goods Oil Engines Pumps Electrical Machinery
Machine Tools Transmission Railway and Contractors' Equipment Automotive Equipment



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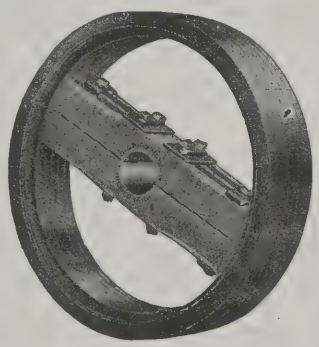
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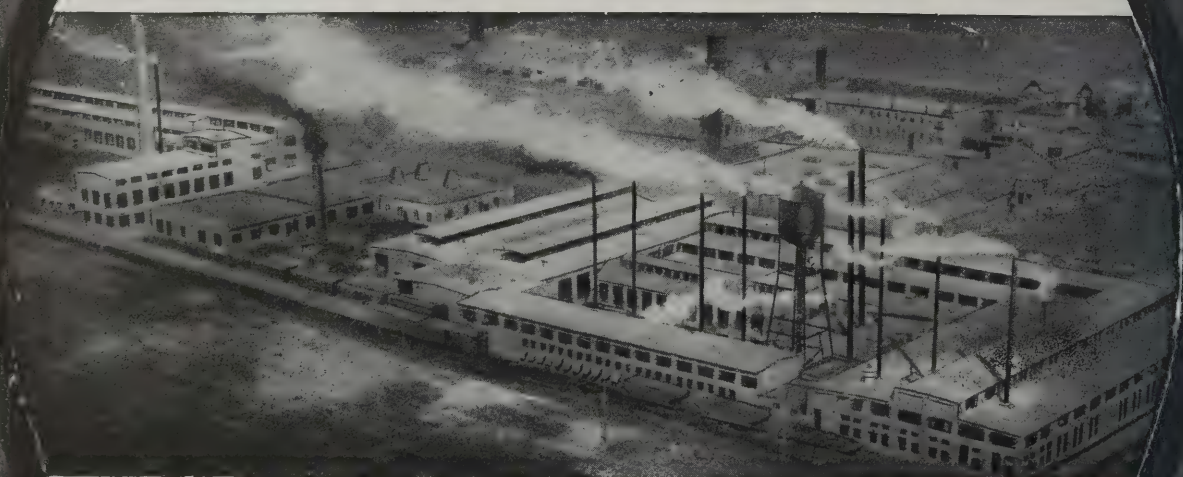


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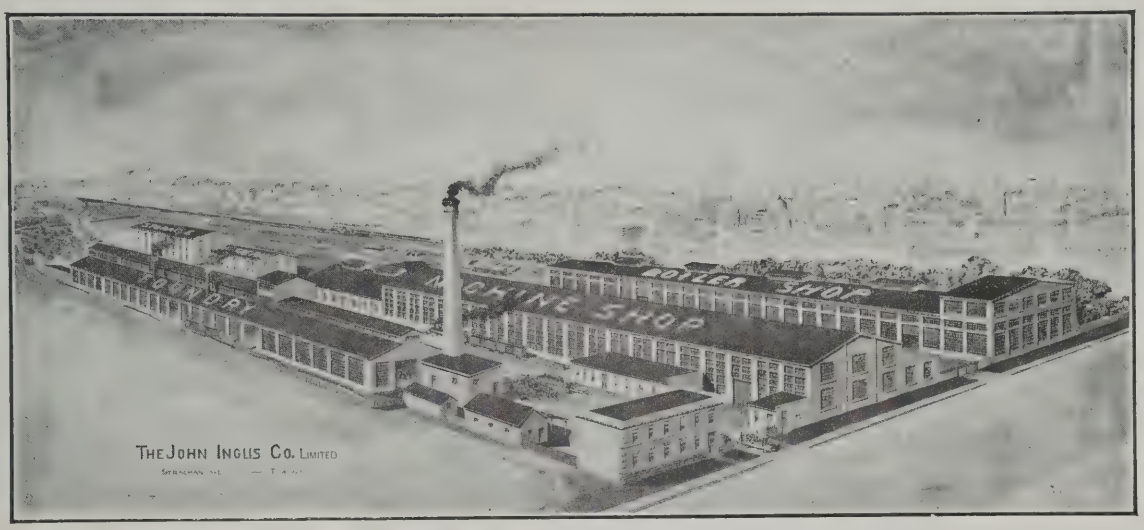
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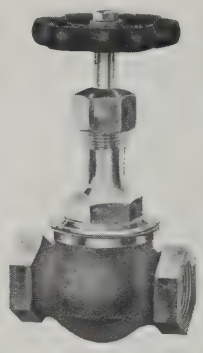


Fig. 106

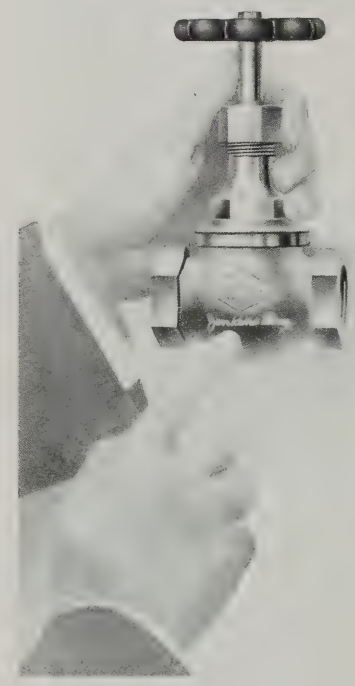
Jenkins Valves

MADE IN CANADA

The Mark of the "Diamond" is the Symbol of Service



Fig. 141



The Jenkins Diamond, the distinguishing mark of unvarying service, is on the body of all Jenkins Valves, Brass, Iron and Cast Steel.

These include types and sizes to meet all requirements.

The man who sees and knows Valve performance makes sure of the Jenkins "Diamond" mark. He has seen genuine Jenkins Valves "on the job" year in and year out---he knows they are made to meet the test of service---and do.

Over fifty years of Valve-making is behind the genuine Jenkins Valve. Stocked by all dealers.

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Jenkins Bros.

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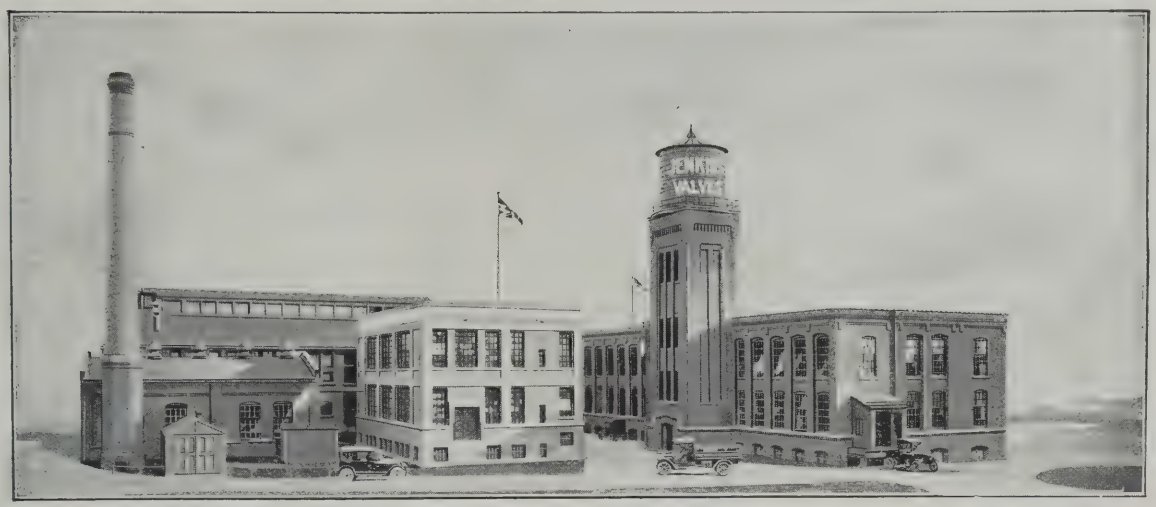
Montreal, Canada

European Branch:

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Kingsway

London, W.C. 2, England



Brass Valve Division, Jenkins Bros. Limited
Montreal, Canada

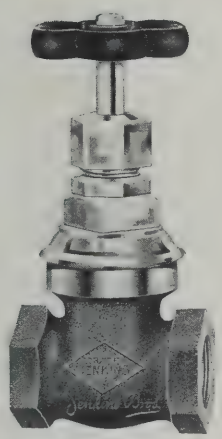


Fig. 300

The manufacture of Jenkins Valves commenced in 1864.

In 1907 JENKINS BROS., LIMITED, commenced the manufacture of Jenkins Valves in Canada.

The factory of Jenkins Bros., Limited, is one of the most modern Valve factories in the world, and is equipped with every tool and device necessary for the production of high class Valves.

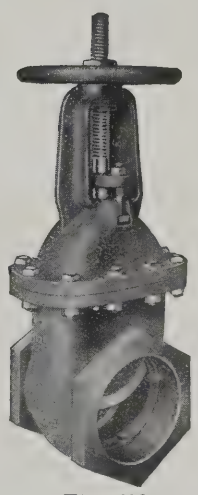


Fig. 403



Fig. 401

A popular addition to the Jenkins line, since its manufacture commenced in Canada, is the TYPE "K" GATE VALVE—made in Brass and Iron Body—in sizes 1/4" to 3" and 2" to 24" respectively, screwed and flanged, with stationary and rising spindle.

The next time you want a Gate Valve try a JENKINS TYPE "K"



Fig. 402

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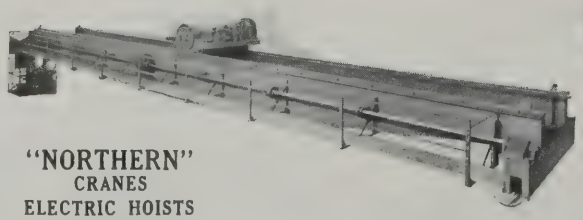
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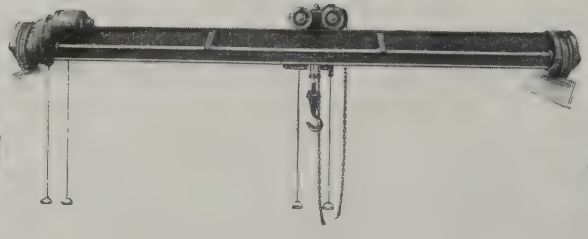
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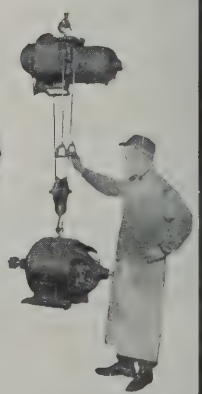
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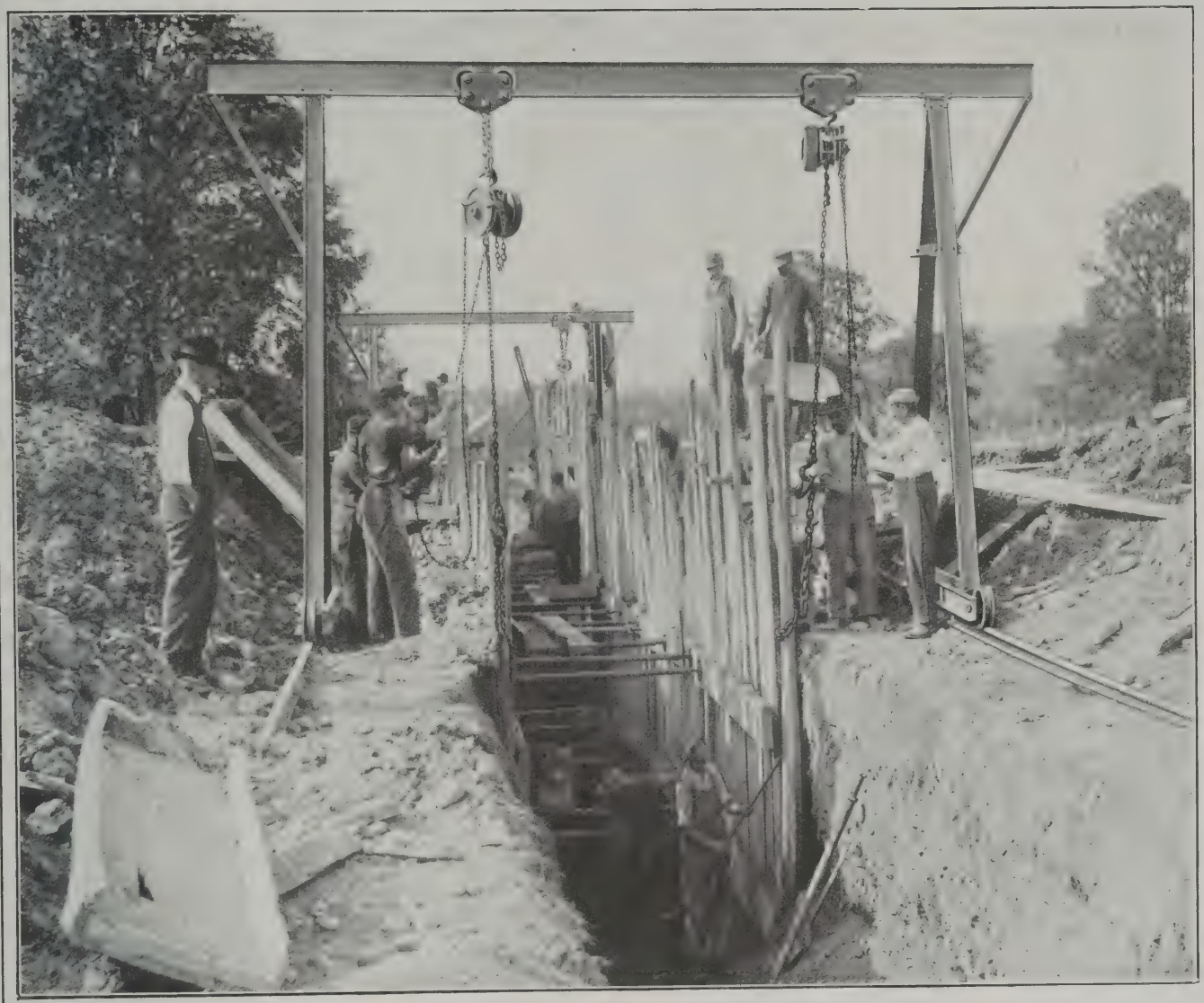






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The crane wheel shown below has rough burrs and ridges left by the moulding. These are effectively and quickly removed with an Alundum wheel, grain 24, grade R.

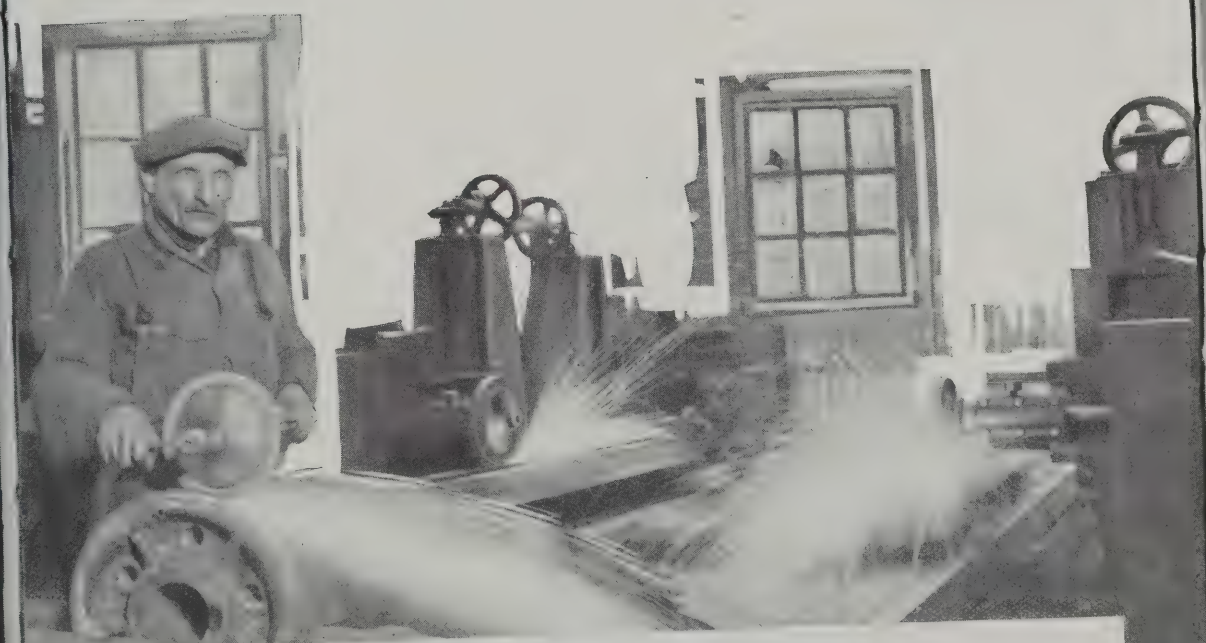
The surface grinding of manganese steel crusher segments on planer type machines is another severe operation for the grinding wheel. Alundum vitrified wheels, grain 24, grade M, do this work successfully.

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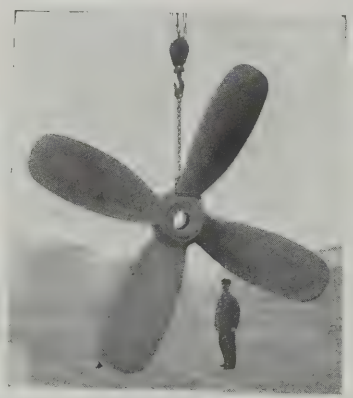
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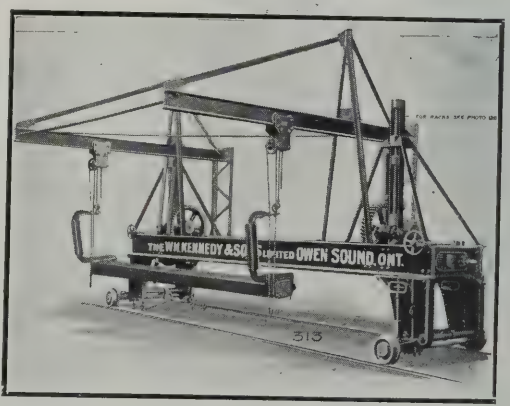
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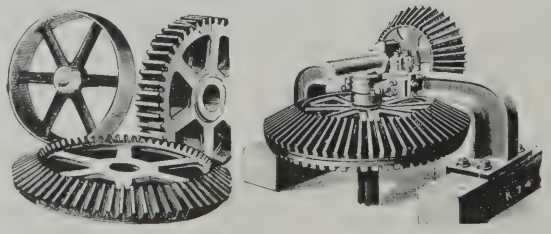


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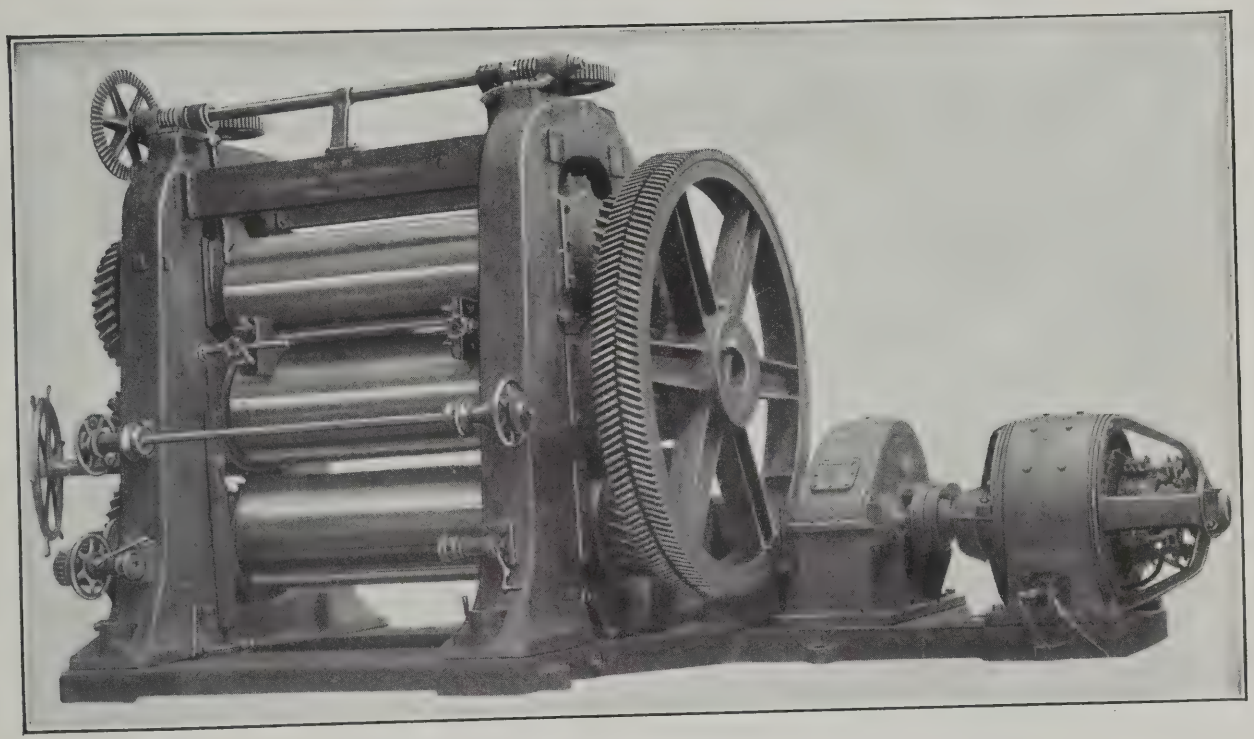
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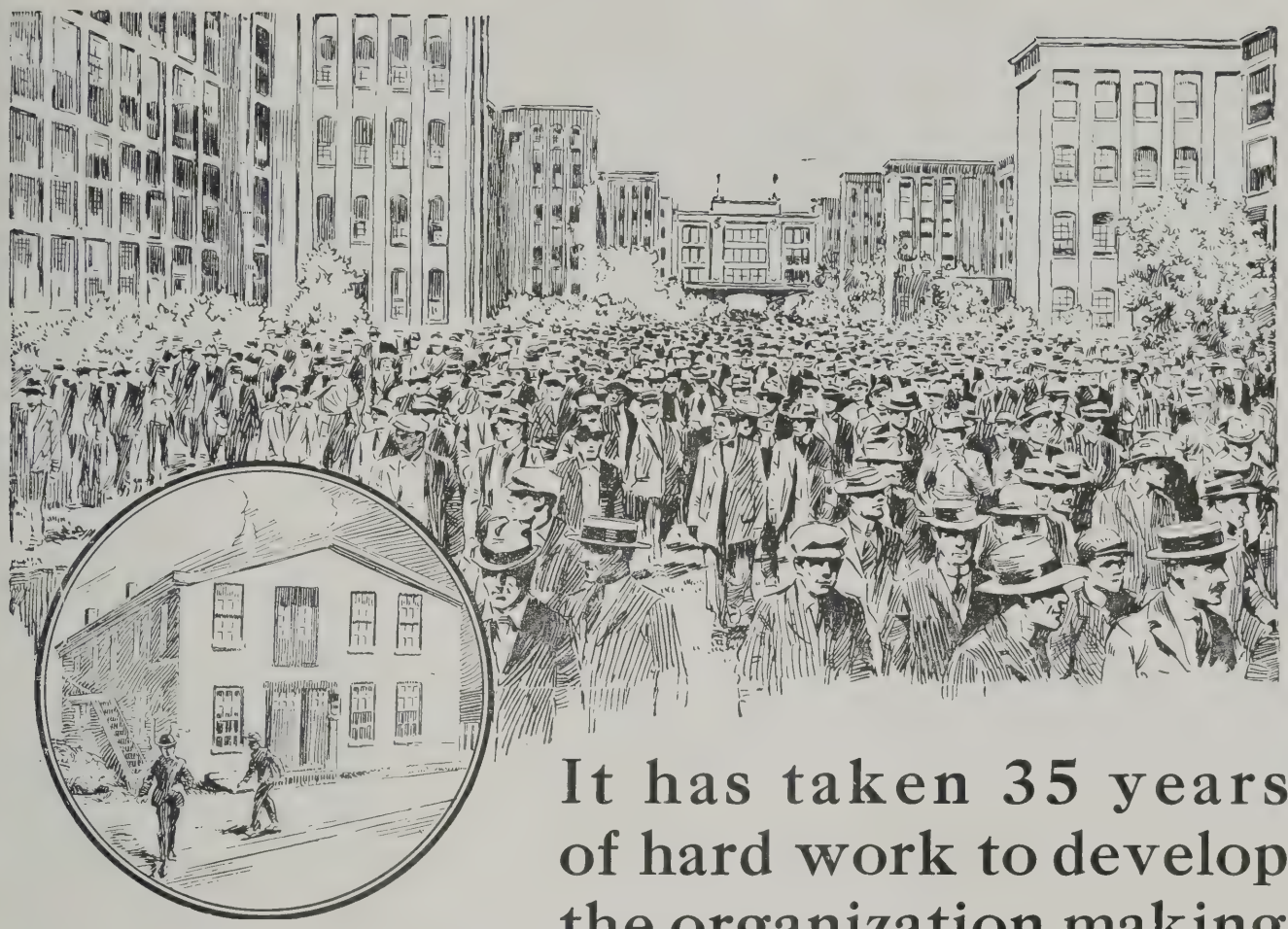
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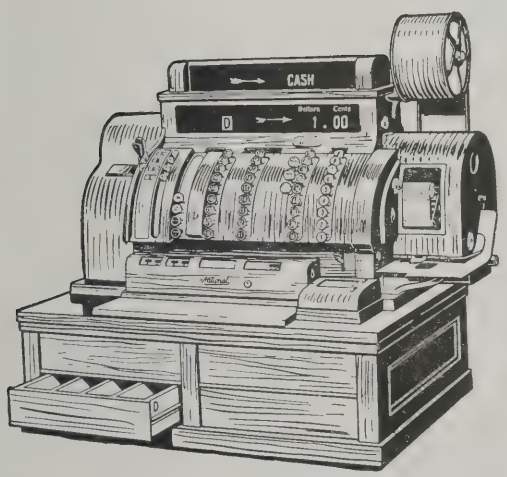
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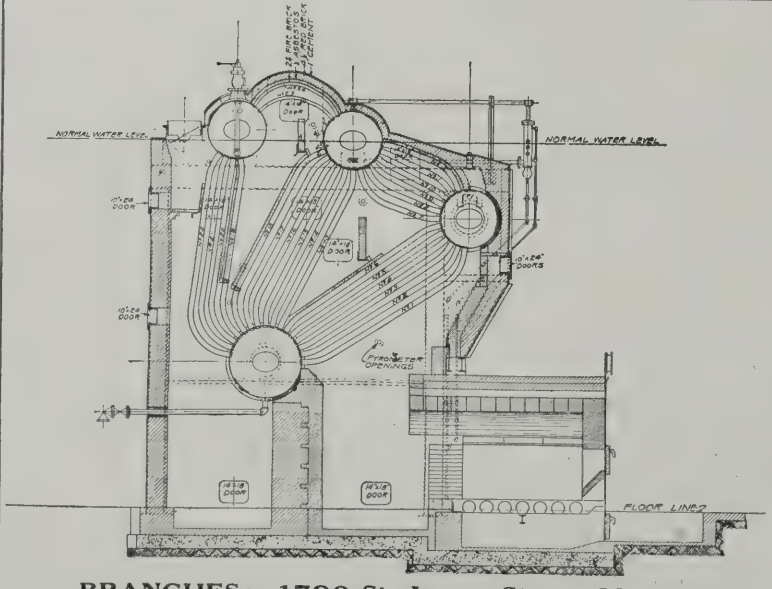
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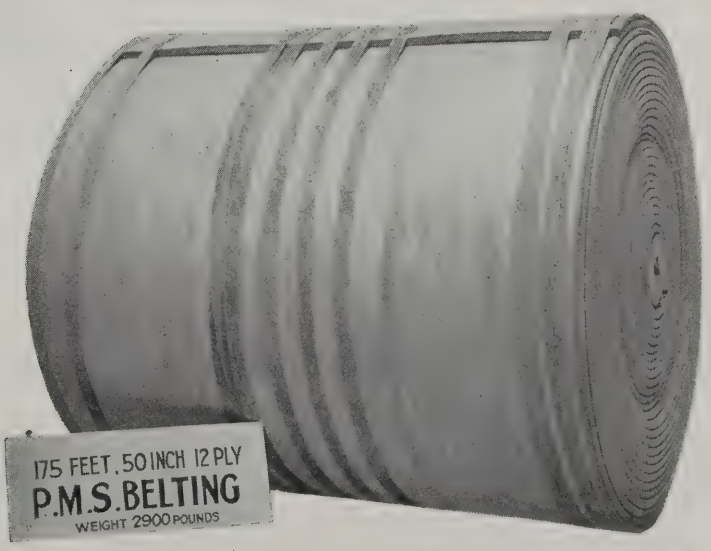
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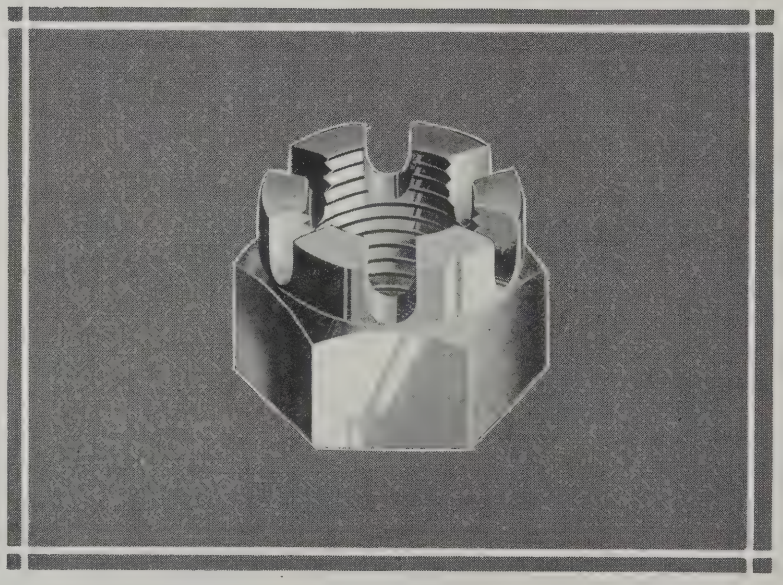
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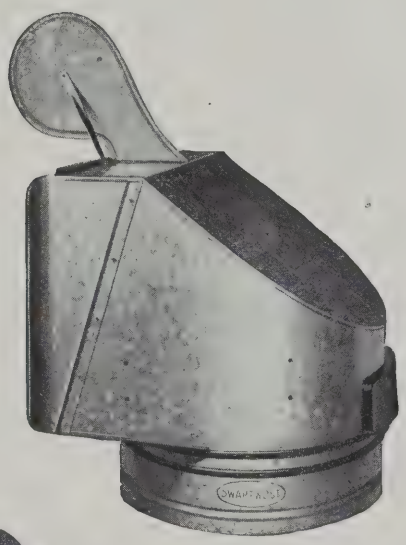
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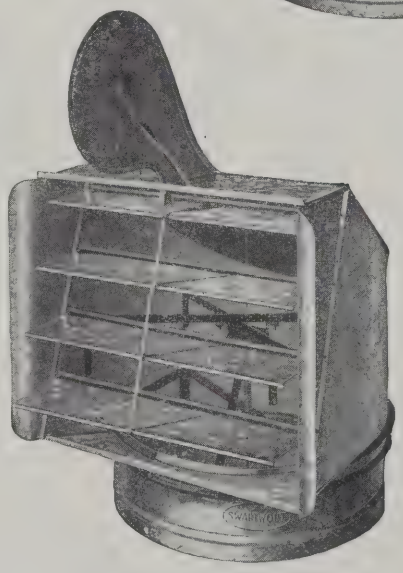
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Patented April 15, 1913 May 28, 1913 Other Patents Pending

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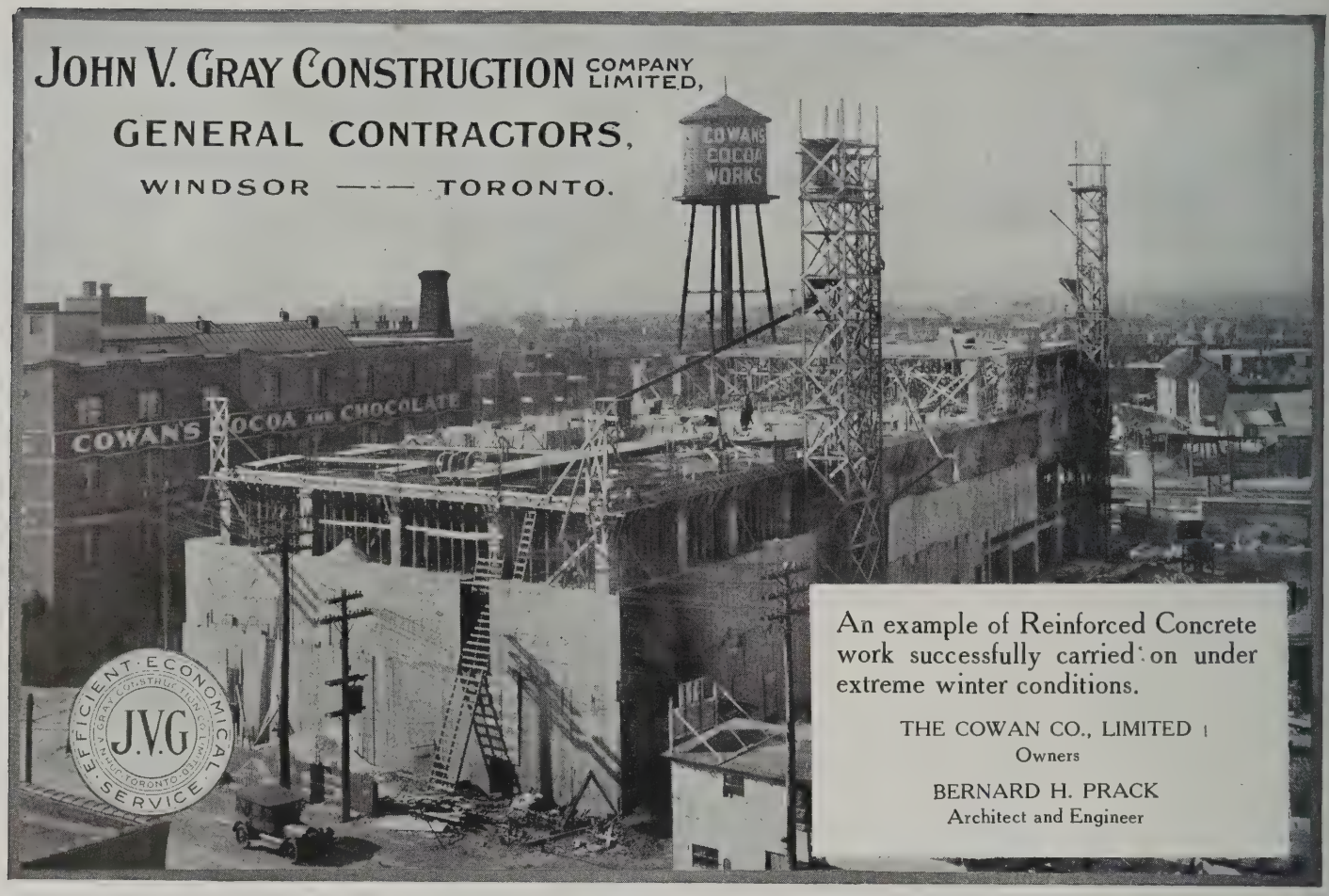
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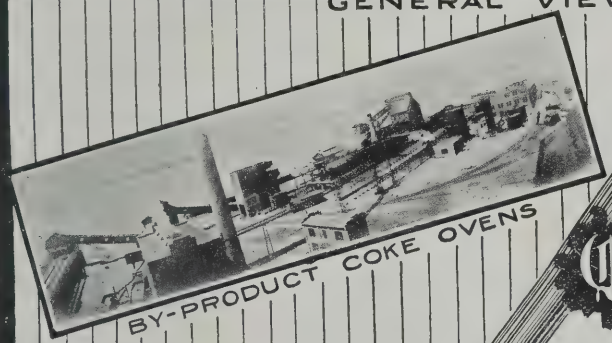
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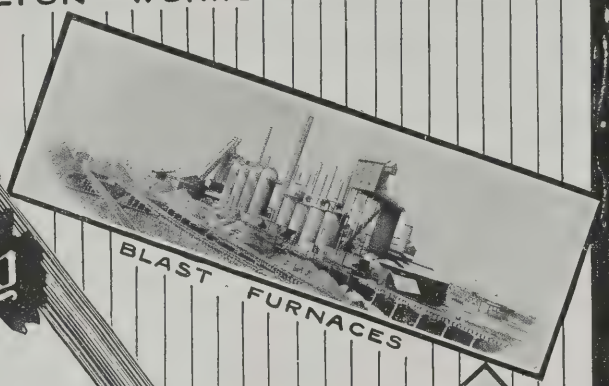
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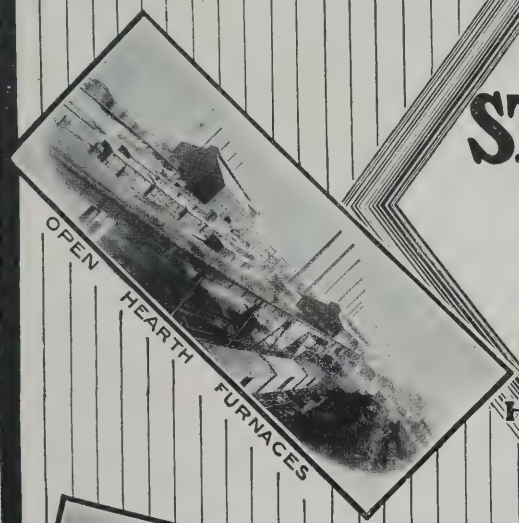
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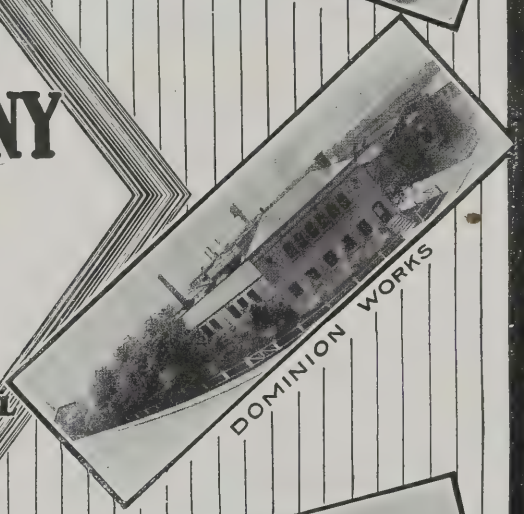
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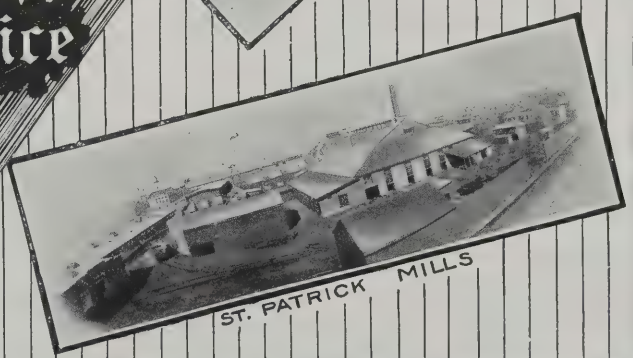
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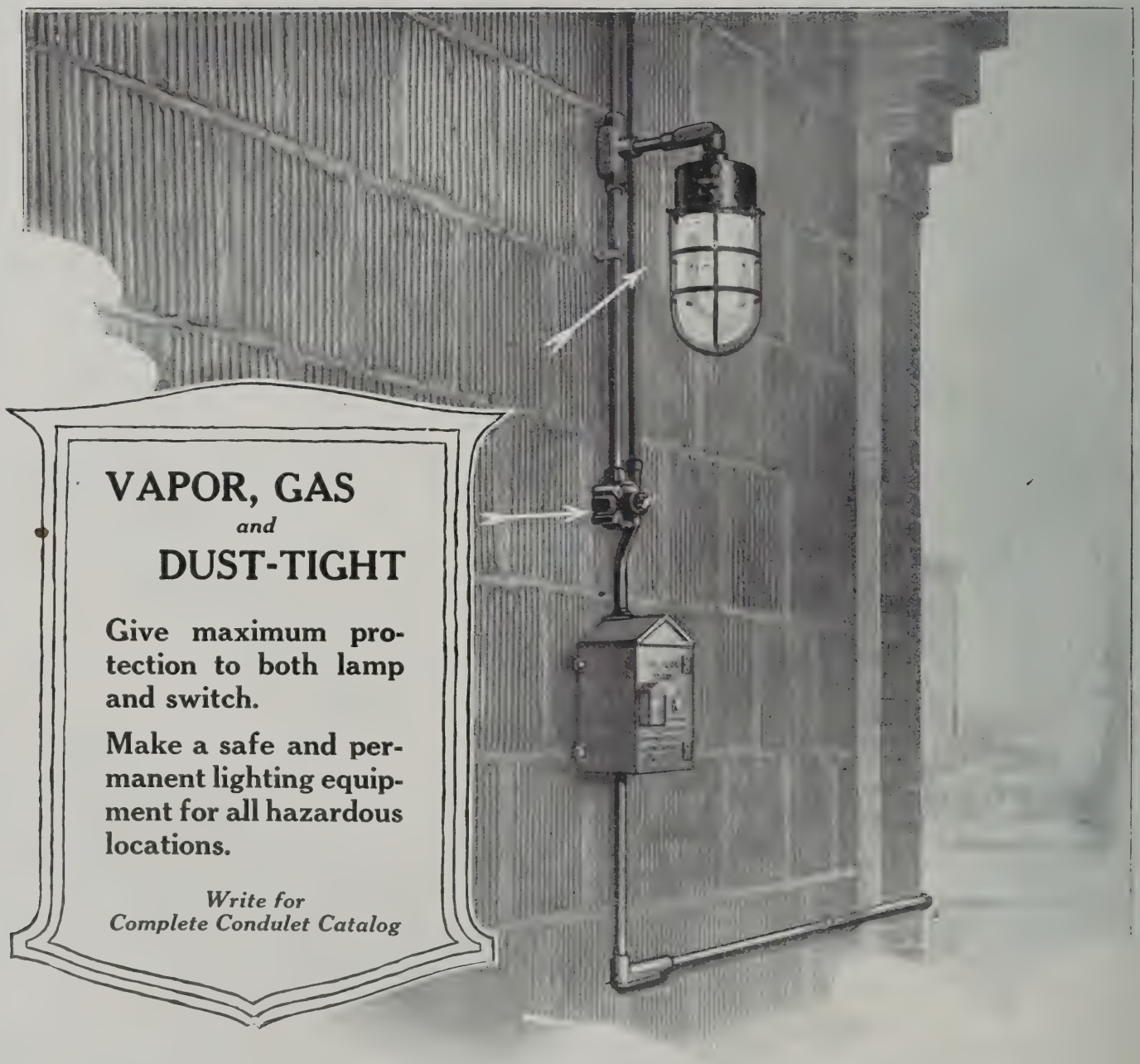


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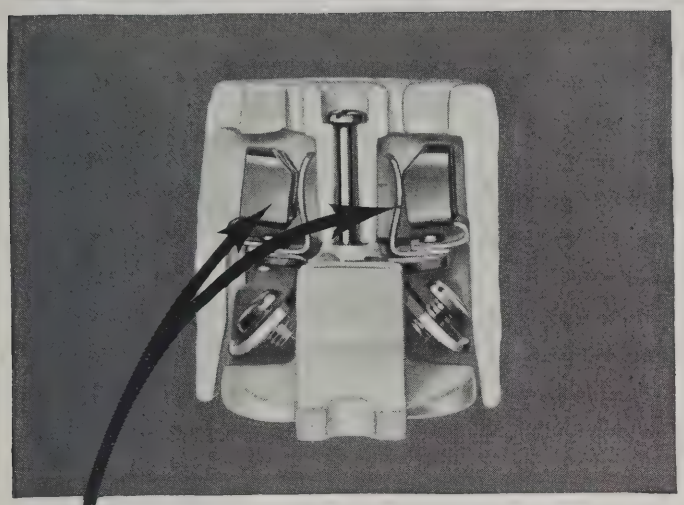
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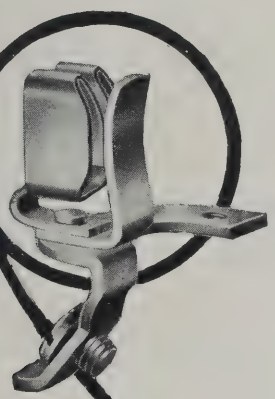
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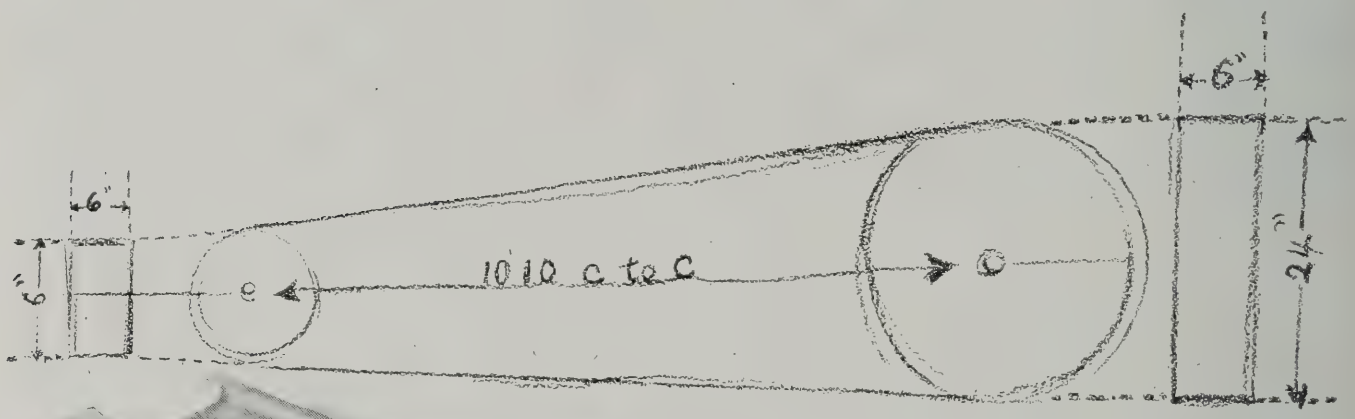
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PULLEY FACES 8"

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H.P. 10





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Damp or wet belts usually slip more easily than dry belts.

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——are absolutely accurately rated, made of the best materials and by the most skilled and careful workmen obtainable.

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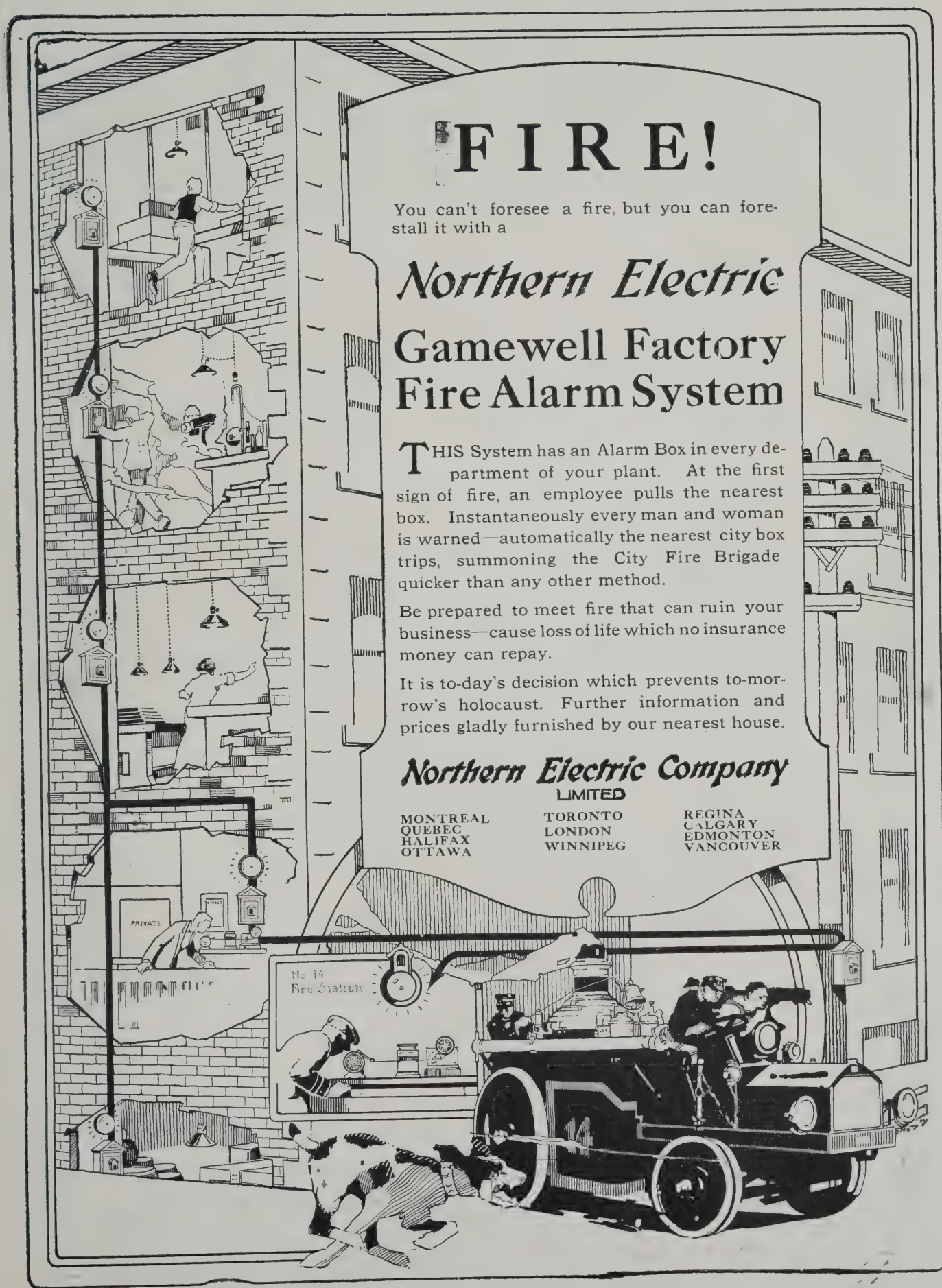
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Throws the heat in any direction, just like an electric fan throws the breeze



To Dealers

To insure spring and summer delivery order your requirements immediately

The Cozy-Glow kills the chill on frosty mornings in the bathroom, nursery or bedroom.

The heat unit is protected by a stout copper-wire guard, which can be removed when cleaning the reflector.

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WINNIPEG—158 Portage Ave. E.
TORONTO—16 Temperance St.
CALGARY—328 9th Ave. W.

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Canadian Westinghouse Co., Limited - Hamilton, Ont.

Toronto	Montreal	Ottawa	Halifax	Ft. William	Winnipeg	Edmonton	Calgary	Vancouver
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FROM TORONTO - 10 p.m. DAILY

STOPS AT AND CONNECTS FOR PRINCIPAL POINTS

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W. B. HOWARD, District Passenger Agent, Toronto.

Canada-South Africa
Direct Service

Regular monthly sailings from Montreal in Summer and St. John, N.B., in Winter, calling at Cape Town, Algoa Bay (Port Elizabeth), East London, Port Natal (Durban) and Delagoa Bay in the order named.

Sailings 20th of each month.

All steamers fitted with refrigerators for the carriage of perishable freight.

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Toronto Agent: S. J. SHARP, 79 Yonge St., Royal Bank Bldg.

CONSULT

EXPORT **M.P. & B.** IMPORT

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SHIPPING

Freight handled to or from any part of the World.

FREIGHT **RATES** QUOTED
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STEAMER **SPACE** ENGAGED

Insurance effected Passenger Agents
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Morison, Pollexfen & Blair
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Freight and Transport Contractors

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Telephone Main 2521

TORONTO
301 Tyrrell Bldg.
Telephone Main 6559

Cable Address "HEADSHIP" for all offices

Recent Trade Enquiries

A List of Enquiries Received from Various Sources including the Canadian Trade Mission, London; the Canadian Trade Commission, Ottawa; the Department of Trade and Commerce, Ottawa; and the Commercial Intelligence Department, C.M.A., Toronto.

DOMESTIC

338. British Columbia.—A reliable firm in New Westminster wishes to get in touch with manufacturers desirous of forming a connection in British Columbia for road machinery, farm implements, portable saw mills, industrial machinery and contractors' supplies. The firm is owned and operated by ex-officers, has good warehousing accommodation with trackage and wharf at New Westminster, offices at Vancouver and Vernon and agents in other parts of the province.

339. Buying supplies in Canada.—A newly-established Canadian industry wishes to buy the following material in Canada: Warp spinning bobbins; spinning and twister tape; roving skewers; steel clad fiber lined roving and spooler trucks.

FOREIGN

340. Wood Split Pulleys.—A London company desires the addresses of Canadian manufacturers of wood split pulleys for power transmission.

341. Turned Goods, Hammocks, Polish, etc.—A Canadian who has established himself as a manufacturer's agent has enquiries for the following goods and would be glad to hear from Canadian manufacturers able to fill orders: Dowels, rolling pins, bread boards, pastry boards, skewers and turned goods of all kinds; also hammocks, bird cages, and brass polishing pastes in 1 oz. tins.

342. Wire Nail Rods.—A London company is open to purchase wire nail rods, and invites offers from Canadian manufacturers.

343. Animal Oils and Fats.—A Liverpool firm wishes to secure a buying agency for animal oils and fats, for margarine and soapmaking purposes.

344. Fish Oils.—A Liverpool firm wishes to secure a buying agency for the above.

345. Hemlock Tanning Extract.—A Liverpool firm are interested in the importation of the above.

346. Condensed Milk.—A Sheffield firm asks to be placed in communication with exporters of condensed milk.

347. Bacon.—An important Liverpool firm desires to secure the agency of an unconnected shipper of the above.

348. Agricultural Implements and Tools.—A Belfast firm asks to be placed in touch with exporters of the above.

349. Crude Asbestos.—A Glasgow firm asks to be placed in touch with exporters of the above.

350. Flake Graphite.—A Glasgow firm asks as to the possibility of procuring the above from Canada.

351. Rubber Footwear.—A Glasgow firm are large buyers of the above.

352. Asbestos Building Materials.—A Glasgow firm asks to be placed in touch with exporters of the above.

353. Machine-Made Brushes.—A Belfast firm are buyers of all kinds of the above in sizes from 8 inches long and down.

354. Brush Stock.—A Belfast firm are buyers of all grades of wood—cut to size for brush stock.

355. Skim Milk Powder.—A Hull firm is interested in importing the above.

356. Marine Motor Specialties.—A Liverpool firm asks to be placed in touch with exporters of the above desiring a representative.

357. Asbestos Building Material.—A Sheffield firm are interested in the importation of the above.

358. Navvy Barrows.—A Sheffield firm of builders' merchants would like to receive offers of the above.

359. Phosphates and Pyrophosphates for Confectionery Purposes. A Liverpool firm ask to be placed in touch with exporters of the above.

360. Butter.—A Hull firm ask to be placed in touch with exporters of the above with a view to business after control is removed.

361. Flake and Medium Ground Oatmeal.—A Belfast firm asks to be placed in touch with manufacturers of the above.

362. Bolts, Nuts and Screws.—A Glasgow firm asks to be placed in touch with exporters of the above.

363. Household Woodenware.—A Glasgow firm ask to be placed in touch with exporters of the above.

364. Enamelware.—A Glasgow firm ask to be placed in touch with exporters of the above.

Exporters : Ship Canadian National "All the Way"

Canadian Government Merchant Marine Limited

SAILINGS, 1920

(Subject to change without notice.)

Liverpool Service.

From Halifax, N.S. — On or about

Canadian Miller ..... Apr. 12th

From St. John, N.B.

Canadian Voyageur ..... Apr. 24th

From Montreal, Que.

Canadian Seigneur ..... May 12th
Canadian Seigneur ..... July 7th
Canadian Ranger ..... May 23rd
Canadian Ranger ..... July 18th
Canadian Miller ..... June 12th
Canadian Miller ..... Aug. 7th
Canadian Victor ..... June 25th
Canadian Victor ..... Aug. 20th

From Sydney, N.S. (via Charlottetown and Halifax).

Canadian Rancher ..... May 20th
Canadian Rancher ..... July 25th
Canadian Raider ..... June 20th
Canadian Raider ..... Aug. 25th

London Service.

From St. John, N.B.

Canadian Navigator ..... Apr. 24th

From Montreal, Que.

Canadian Settler ..... May 14th
Canadian Trapper ..... May 21st
Canadian Hunter ..... June 4th
Canadian Fisher ..... June 22nd

Glasgow Service.

From Montreal, Que.

Canadian Aviator ..... (as soon as available)
Canadian Forester ..... July 10th

Brazil and Buenos Aires Service.

(Calling at Pernambuco, Rio de Janeiro, Santos, Brazil.)

From Montreal, Que.

Canadian Planter ..... May 15th
Canadian Pioneer ..... June 15th
Canadian Spinner ..... July 15th
Canadian Mariner ..... Aug. 15th

Havana, Cuba, Service.

From Halifax, N.S.

Canadian Sailor ..... April 3rd
Canadian Trader ..... April 24th
Canadian Sailor ..... May 7th

From Montreal, Que.

Canadian Farmer ..... May 15th

From St. John, N.B. — On or about

McKee ..... April 10th
Sheba ..... April 17th
Canadian Sower ..... April 25th
Canadian Adventurer ..... May 4th
Canadian Signaller ..... May 15th
Canadian Sower ..... May 25th
Canadian Warrior ..... June 1st
Canadian Adventurer ..... June 8th
Canadian Signaller ..... June 15th
Canadian Sower ..... June 24th
Canadian Warrior ..... July 4th

Kingston, Jamaica, Service.

From St. John, N.B.

Canadian Warrior ..... April 23rd

From Montreal, Que.

Canadian Beaver ..... May 14th
Canadian Beaver ..... July 2nd
Canadian Gunner ..... June 1st
Canadian Gunner ..... July 20th
Canadian Farmer ..... June 16th
Canadian Farmer ..... Aug. 2nd

Barbados, Trinidad and Demerara Service.

From Halifax, N.S.

Canadian Gunner ..... April 10th

From Montreal, Que.

Canadian Volunteer ..... May 14th
Canadian Volunteer ..... July 9th
Canadian Trooper ..... May 28th
Canadian Trooper ..... July 23rd
Canadian Voyageur ..... June 12th
Canadian Voyageur ..... Aug. 6th
Canadian Navigator ..... June 24th
Canadian Navigator ..... Aug. 20th

St. John's, Newfoundland.

From Charlottetown, P.E.I.

Canadian Sealer ..... May 8th
Canadian Sealer ..... May 22nd

From Montreal, Que.

Canadian Rancher ..... May 8th
Canadian Miner ..... May 25th
*Canadian Sealer ..... June 10th
*Canadian Miner ..... June 15th
*Canadian Sealer ..... July 4th

*Via Charlottetown, if cargo offers.
(Thence fortnightly.)

Australian and New Zealand Service.

From Vancouver, B.C.

Canadian Inventor ..... April 20th
Canadian Prospector ..... May 20th

These vessels of the Canadian Government Merchant Marine, Limited, are being operated under the direction of Canadian National Railways. The two combined—rails and ships—constitute Canada's great adventure in public ownership. If shippers in Canada support their own box cars and vessels, as they deserve to be supported, the adventure will certainly be crowned with success.

GET THE "NATIONAL" HABIT

Any Canadian railway agent can furnish information about rates and space, or
D. O. WOOD, Traffic Manager, Export and Import Dept., Canadian National Railways, Toronto, Ontario.

Canadian National Railways

365. Wire Nails, Bolts and Nuts.—A Glasgow firm are interested in importing the above.

366. Machine and Engineer's Small Tools.—A Glasgow firm are interested in the above.

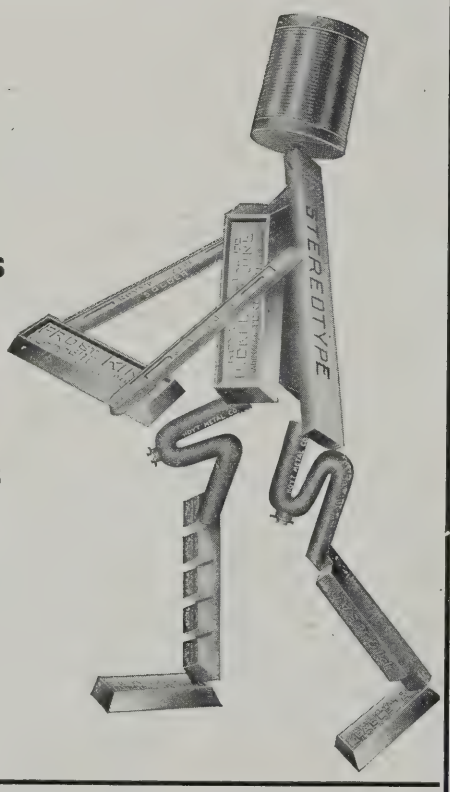
367. Wire Nails.—A Glasgow firm asks to be placed in touch with exporters of the above.

368. Clothes Pegs.—A London Company would be glad to hear from Canadian manufacturers of clothes pegs and spring clips who can fill orders.

369. Timber.—A firm established in London for 25 years would like to secure the London or English agency for timber or general building material. They use a great deal of these commodities, and feel confident they could find a ready market for the same.

370. Greece.—A Greek shipping owner of good standing is anxious to assist in the development of trade between Canada and the Balkans. He has resided in Roumania for 26 years and knows the markets of the country. He is desirous of getting in touch with Canadian concerns wishing to extend their trade to the Balkans.

Babbitts
Solders
Pig Metals
Type Metals
Lead Pipe
Lead Traps
Lead Sheet
Lead Cames



Largest Makers of
WHITE METALS
in the World

HOYT METAL COMPANY
Montreal TORONTO Winnipeg

371. Box Shooks.—A Liverpool importer wishes to secure quotations on box shooks for export direct from Canada to Greece. The quantity required is for 500,000 cases. Shooks must be Whitewood, planed on one side and roughed off on the other, with specifications as follows: T. & B. 19½-inch x 101-8-inch x ¾-inch sides. 19½ x 8-inch x 7-16-inch, ends 9¼-inch x 8-inch x 9-16.

372. Maple Blocks and Squares.—A Liverpool agent who claims to be in touch with a large demand for the above, desires to secure an agency from a firm of exporters.

373. Plywood.—A Liverpool firm asks to be placed in touch with exporters of the above.

374. Wire.—A London Company desires the addresses of important Canadian manufacturers of galvanized wire, plain wire and barbed wire.

375. Automobile Accessories and Engineering Sundries.—A London Company maintaining branches all over the world, would be glad to negotiate for the sole agency of Canadian manufacturers in a position to regularly export automobile accessories and engineering sundries.

376. Lawn Mowers.—A London Company is desirous of hearing from Canadian manufacturers of lawn mowers in a position to fill orders for Siam.

377. Hardware, Domestic Appliances, etc.—A company in New Zealand would be glad to receive catalogues and price lists, as well as details of packing and shipping, from Canadian manufacturers of the following: Asbestos building sheets, concrete mixers, aluminium utensils, enamelware utensils, leather belting, veneer, plain galvanised iron, corrugated galvanised iron, steel bars, sheet steel, wire nails, wood screws, wringers, lawn mowers, washing machines, hickory axe and tool handles, churns, hand separators, building hardware, mechanics' tools, household ironmongery.

378. Acetate of Lime.—A Paisley firm are large buyers of the above, and ask to be placed in touch with exporters.

379. Algiers.—A firm in Algiers wishes to secure the monopoly and exclusive agency for any Canadian manufacturers of the following articles: Paints, oil and varnish, brushes, shoes, furs, hair brushes and combs, string, wire, nails, etc. Their references are good.

380. Formaldehyde.—A Leeds firm is in a position to import considerable quantities of formaldehyde 40 per cent.

381. Ferro Alloys.—A Sheffield firm asks to be placed in touch with manufacturers of ferro-chrome, ferro-silicon, ferro-molybdenum.

382. Lactic Acid.—A Leeds firm ask to be placed in touch with actual makers of lactic acid.

383. Quills.—A London firm who are large buyers of raw quills (goose and duck) for the manufacture of pens, toothpicks, etc., are desirous of purchasing supplies from Canada.

384. Chocolates and Canned Goods.—A firm of wholesale grocers and provision merchants in Brighton wish to purchase direct Canadian chocolates and other confectionery; also canned fruits, vegetables, meats, salmon and condensed milk, of which they buy large quantities.

385. Broom Handles and Chair Seats.—A London Company are open to purchase broom handles, three-ply veneer chair seats, and three-ply veneer as used in tramcars, and would be glad to receive offers from Canadian manufacturers.

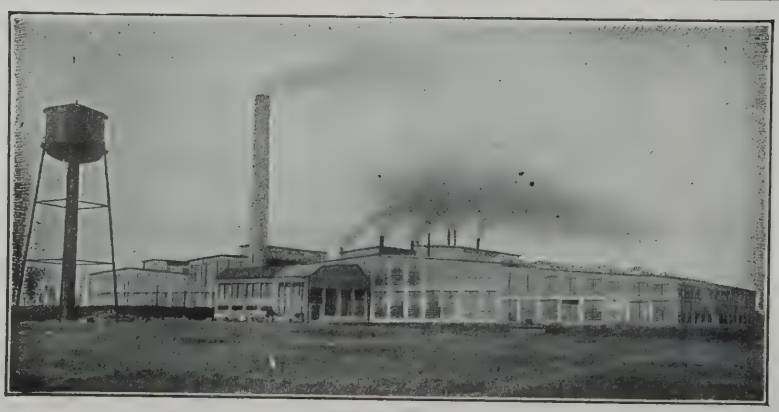
386. Canned Salmon.—A London firm wishes to purchase canned salmon for direct shipment to France and invites offers from Canadian packers.

387. New Zealand.—An agency in New Zealand desires to get in touch with Canadian manufacturers of men's hats, ties, braces, etc. They wish to represent Canadian firms in the above lines for the Dominion of New Zealand.

388. Egypt, Palestine, Syria and Cilicia.—A gentleman with good references would like to communicate with manufacturers who are in need of an agent for the above countries. He is well acquainted with the countries and roads, railway and shipping services, official departments and traders. For the last three years he has been engaged in transportation—in Egypt since 1917, in the other countries since their occupation.

ARMSTRONG WHITWORTH OF CANADA
LIMITED

Montreal,
Toronto,
Hamilton,
Winnipeg



Manufacturers in Canada of

Locomotive and Car Wheel Tires

HIGH SPEED and CARBON TOOL STEEL

Works: LONGUEUIL, QUE.

Minister:
Hon. W. R. Rollo

Department of Labour
ONTARIO GOVERNMENT

Deputy Minister:
W. A. Riddell, Ph.D

INVESTIGATION AND RESEARCH

The Department is the provincial centre for investigation and research in matters connected with labour. Pamphlets on vocational opportunities for boys and girls in the industries of the Province are being prepared. A report upon the Mothers' Pensions investigation undertaken by the Department is now in the hands of the printer. Legislation affecting industry is continually under consideration.

ADMINISTRATION OF

1. The Stationary and Hoisting Engineers' Act.
2. The Factory, Shop and Office Building Act.
3. The Steam Boiler Act.
4. The Building Trades Protection Act.
5. The Employment Agencies Act.
6. The Bureau of Labour Act.

Ontario Government Employment Bureaus
(Employment Service of Canada)



ELEVATED STEEL TANKS

Penstocks, Standpipes, Miscellaneous Tank and Plate Work, Highway Bridges, Mill and Office Buildings

Inquiries will be appreciated Quotations submitted promptly

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"DOMTAR BRANDS"

Black Varnish
Creosote Oils
Wood Preservative Oils
Hard Coal-Tar Pitch
Naphthalene
Disinfectants
Crude Carbolic Acids
Road Tars (Domtarbond)
Phenols and Cresols
Paint Naphthas
Crude Naphthas
Shingle Stain Oils

Dominion Tar and Chemical Co. LIMITED

TAR DISTILLERIES

SAULT STE. MARIE, Ont. SYDNEY, N.S.

Address all communications to Sales Office
400 McKinnon Bldg. - Toronto, Ont.

Buyers' Guide to Canadian Manufactures

List of Articles which will Enable the Purchaser to Know the Manufacturers of Made-in-Canada Goods. Rates for insertion in this department, $4.00 per heading per year (12 insertions).

ABRASIVES
*Canadian Hart Wheels, Limited, Hamilton, Ont.
*Dominion Abrasive Wheel Co., New Toronto, Ont.

ACCOUNT BOOKS
*The Brown Bros., Ltd., Toronto.

ACCUMULATORS, hydraulic
*The Hydraulic Machinery Co., Limited, Montreal.

ACETYLENE GAS
*The Prest-O-Lite Company of Canada, Ltd., Toronto, Ont.

ACETYLENE GAS BURNERS
Economic Acetylene Burner Co., Toronto, Ont.
*The Prest-O-Lite Company of Canada, Ltd., Toronto, Ont.

ACID PROOF COATINGS
*Beveridge Paper Co., Ltd., Montreal, Supply Department.

ACIDS
*The Grasselli Chemical Co., Ltd., Toronto.
*The Nichols Chemical Co., Ltd., Montreal, Que.

ADVERTISING NOVELTIES
Lawson & Jones, Ltd., London, Ont.

ADVERTISING SIGNS
Cross Press & Sign Co., Ltd., Woodstock, Ont.

AERATED BEVERAGES
Charles Gurd & Co., Ltd., Montreal, Que.
J. J. McLaughlin, Ltd., Toronto.

AIR COMPRESSORS
*Canadian Ingersoll-Rand Co., Montreal, Que.
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.

AIR LIFT PUMPS
Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.

ALCOHOL
*Canadian Industrial Alcohol Company, Ltd., Montreal, Que.

ALUMINUM
*Northern Aluminum Co., Ltd., 1805 Traders Bank, Toronto,

ALUMINUM CASTINGS
*Tallman Brass & Metal Co., Hamilton, Ont.

AMMONIA
Canadian Ammonia Co., Ltd., Toronto, Ont.

ANCHORS, all steel
Beauchemin & Fils, Ltd., Sorel, Que.

ANGLE BARS
*Burlington Steel Co., Ltd., Hamilton, Ont.
*MacKinnon Steel Co., Limited, Sherbrooke, Que.
*The Steel Company of Canada, Ltd., Hamilton, Ont.

ARSENIC
*Deloro Smelting & Refining Co., Limited. Deloro, Ont.

ARTIFICIAL LIMBS
Chesley Artificial Limb Co., Ltd., Hantsport, N.S.

ASBESTOS
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

ASBESTOS SHEATHING
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

ASBESTOS SHEET AND PISTON PACKINGS
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

ASBESTOS STEAM PIPE AND BOILER COVERINGS
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

ASBESTOS TEXTILES
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

AUTOMOBILE ACCESSORIES
*McKinnon Industries Limited, St, Catharines, Ont.
*Northern Electric Co., Limited, Montreal, Que.
*Tallman Brass & Metal Co., Hamilton, Ont.

AUTOMOBILE PARTS
*Dominion Forge & Stamping Co., Walkerville, Ont.

AWNING CORD (cotton)
Hamilton Cotton Co., Hamilton, Ont.

AXLES
Canada Forge Co., Ltd., Welland, Ont.
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

AXLES, carriage and automobile
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

BABBITT METAL
Alonzo W. Spooner, Ltd., Port Hope, Ont.
*Hoyt Metal Co., Toronto, Ont.
*The Canada Metal Co., Toronto, Ont.
*Tallman Brass & Metal Co., Hamilton, Ont.

BACON
F. W. Fearman Co., Ltd., Hamilton, Ont.

BAGS, Cotton
The Canadian Bag Co., Limited, Montreal, Que.

BAGS, jute
The Canadian Bag Co., Limited, Montreal, Que.

BAGS, travelling
J. Eveleigh & Co., Ltd., Montreal.
Lamontague, Ltd., Montreal, Que.
*The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto, Ont.

BAND RESAWS
*Canada Machinery Corporation, Limited, Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.

BAND SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.

BANK FITTINGS
The Canadian Office & School Furniture Co., Ltd., Preston, Ont.

BANK AND OFFICE RAILINGS AND CAGES
*Canada Wire and Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
*The Geo. B. Meadows, Toronto, Wire, Iron & Brass Works Co., Ltd., Toronto, Ont.

BANK SIGNS AND FITTINGS
*Tallman Brass & Metal Co., Hamilton, Ont.

BARRELS, steel, and containers
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.

BARS, iron
London Rolling Mill Co., Ltd., London, Ont.

BARS, steel
London Rolling Mill Co., Ltd., London, Ont.

BASEBALL GOODS
A. J. Reach Co., Brantford, Ont.

BATHS, enamelled
Amherst Foundry Co., Ltd., Amherst, N.S.

BATTERIES, dry
*The Canadian National Carbon Co., Ltd., Toronto, Ont.

BATTERIES, Flashlight
*The Canadian National Carbon Co., Ltd., Toronto, Ont.

BATTERIES, Storage
*The Canadian National Carbon Co., Ltd., Toronto, Ont.

BEARINGS
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

BEARINGS, bronze
*Tallman Brass & Metal Co., Hamilton, Ont.

BEARINGS, pillow block and upright
*Canadian Fairbanks-Morse Company, Ltd., Montreal, Que.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

BEEF
F. W. Fearman Co., Ltd., Hamilton, Ont.

BELTING, chains
*Canadian Link-Belt Co., Toronto.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

BELTING, elevator
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.

BELTING, leather
The Beardmore Belting Co., Ltd., Toronto, Ont.
*J. L. Goodhue & Co., Danville, Que.
*The D. K. McLaren Belting Co., Ltd., Montreal, Que.
*The J. C. McLaren Belting Co., Ltd., Montreal, Que.

BELTING, rubber
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Gutta Percha and Rubber Ltd., Toronto, Ont.

BELTING, stitched cotton duck
*Dominion Belting Co., Ltd., Hamilton, Ont.

BENT GOODS
The Crown Lumber Co., Woodstock, Ont.

BISCUITS
The Montreal Biscuit Co., Montreal, Que.

BLACK SHEETS
*A. C. Leslie & Co., Montreal, Que.

BLANKETS
Slingsby Mfg. Co., Ltd., Brantford, Ont.
J. Walshaw & Son, Ltd., Bolton, Ont,

BLANKETS, horse
Slingsby Mfg. Co., Ltd., Brantford, Ont.
J. Walshaw & Son, Ltd., Bolton, Ont.

BLASTING ACCESSORIES
Canadian Explosives, Ltd., Montreal, Que.

BLEACHING POWDER
*Canadian Salt Co., Ltd., Windsor, Ont.

BLOWERS
*The Canadian Blower & Forge Co., Ltd., Kitchener, Ont.

BOARDS, paper, fibre, press
*Beveridge Paper Co., Ltd., Montreal, Supply Department.

BOATS OF ALL KINDS
Peterboro Canoe Co., Ltd., Peterboro, Ont.

BOBBINS
Canada Spool & Bobbin Co., Ltd., Walkerton, Ont.

BOILER COMPOUND
*Beveridge Paper Co., Ltd., Montreal, Supply Department.

BOILER COMPOUND AND OILS
Electric Boiler Compound Co., Ltd., Guelph. Ont.

BOILER GRAPHITE
Black Donald Graphite Company, Limited, Calabogie, Ont.

BOILER LININGS AND COVERINGS
*Beveridge Paper Co., Ltd., Montreal. Supply Department.

BOILERS
*Canadian Mead Morrison Co., Ltd., Montreal, Que.
*Goldie & McCulloch Co., Limited, Galt, Ont.
*E. Leonard & Sons, Ltd., London, Ont.
J. & R. Weir, Montreal, Que.
Taylor-Forbes Co,, Ltd., Guelph,
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

BOILERS, hot water or steam
Warden King, Ltd., Montreal.

BOILERS, steam
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

BOILERS, steam and brass work
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

BOILER STANDS
Anthes Foundry Ltd., Toronto.

BOLTS AND NUTS
*The Canadian Tube & Iron Co., Ltd., Montreal, Que.
*The National Acme Mfg. Co., Montreal, Que.
*The Steel Company of Canada. Ltd., Hamilton, Ont.

BOOKBINDERS
R. G. McLean, Toronto.
*The Brown Bros., Ltd., Toronto.

BOOKCASES
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

BOOKCASES, sectional (Gunn)
The George McLagan Furniture Co., Ltd., Stratford, Ont.

BOOKLETS
R. G. McLean, Toronto.

BOOKS, blank
*The Brown Bros., Ltd., Toronto.

BOOTS AND SHOES
J. Leckie Co., Ltd.
The John Ritchie Co., Ltd., Quebec, Que.

BOXES, cellular and fibre board
*Hinde & Dauch Paper Co. of Canada, Limited, Toronto.
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls.

BOXES, rattle and soap
The Arlington Co. of Canada, Ltd., Toronto, Ont,

BOXES, steel shop
*Steel Trough and Machine Co., Ltd., Tweed, Ont.

BOXES AND SHOOKS, wooden
The C. Beck Mfg. Co., Ltd., Penatanguishene, Ont.

BOXES, wooden
G. & J, Esplen, Montreal, Que.
Barchard & Co., Ltd., Toronto.

BRAKE SHOES
*Canadian Hart Wheels, Limited, Hamilton, Ont.

BRANDS, burning
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS BOLTS AND NUTS
*Tallman Brass & Metal Co., Hamilton, Ont.

BRASS AND BRONZE WIRE
*Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.

BRASS, BRONZE and ALUMINUM LETTERS
*Tallman Brass & Metal Co., Hamilton, Ont.

BRASS ENGRAVERS
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS FOUNDERS AND FINISHERS
*The Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
*Tallman Brass & Metal Co., Hamilton, Ont.

BRASS GOODS
*The Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
The James Morrison Brass Mfg. Co., Ltd., Toronto, Ont.
*The Kerr Engine Co., Limited, Walkerville, Ont.
*Tallman Brass & Metal Co., Hamilton, Ont.

BRASS PLATES
*Tallman Brass & Metal Co., Hamilton, Ont.

*For Display Advertisement see Index, Page 53

BRASS RODS
*Tallman Brass & Metal Co., Hamilton, Ont.

BRASS RODS, SHEETS AND PLATES
*Brown's Copper and Brass Rolling Mills, Ltd,, New Toronto.

BRASS SHEETS AND PLATES
*Dominion Copper Products Company, Ltd., Montreal, Que.

BRASS SIGNS AND MEMORIALS
*Tallman Brass & Metal Co., Hamilton, Ont.

BRASS TUBING, seamless
Canadian Seamless Wire Co., Ltd., Toronto, Ont.
*Tallman Brass & Metal Co., Hamilton, Ont.
*Dominion Copper Products Company, Ltd., Montreal, Que.

BRASS WIRE
Canadian Seamless Wire Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton, Ont.

BRASS WORK, church
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS WORK, special
*Tallman Brass & Metal Co., Hamilton, Ont.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

BRICK
*Interprovincial Pressed Brick Co. of Canada, Limited, Toronto.
National Brick Co. of Laprairie, Laprairie, Que.
Port Credit Brick Co., Port Credit, Ont.
The Citadel Brick & Paving Block Co., Ltd., Quebec, Que.

BRICK, enamel
National Brick Co. of Laprairie, Laprairie, Que.

BRICK, pressed
National Brick Co. of Laprairie, Laprairie, Que.
The Citadel Brick & Paving Block Co., Ltd. Quebec, Que.

BRICK, rubbing
*Canadian Hart Wheels, Limited, Hamilton, Ont.

BRICK, sewer.
National Brick Co. of Laprairie, Laprairie, Que.

BRIDGES, Railway and Highway
*Canadian Des Moines Steel Co., Limited, Chatham.
*Hamilton Bridge Works Co., Ltd., Walkerville, Ont.
*The Canadian Bridge Co., Ltd., Hamilton, Ont.
*McGregor & McIntyre, Ltd., Toronto, Ont.
*Dominion Bridge Co., Montreal.
*Mackinnon Steel Co., Ltd., Sherbrooke, Que.

BROOMS
Simms, T. S., & Co., Limited, St. John, N.B.
Stevens-Hepner Co., Limited. Port Elgin, Ont.

BRONZE SHEETS, RODS, PLATES
*Dominion Copper Products Company, Ltd., Montreal.

BRONZE SHEETS, RODS, PLATES
*Brown's Copper and Brass Rolling Mills, Ltd., New Toronto.

BRONZE TUBING, seamless
*Dominion Copper Products Company, Limited, Montreal,

BRUSHES
Simms, T. S., & Co., Limited, St. John, N.B.
Stevens-Hepner Co., Ltd., Port Elgin, Ont.

BRUSHES, carbon
*Canadian National Carbon Co., Ltd., Toronto.

BUCKET TANKS
*MacKinnon Steel Co., Ltd,, Sherbrooke, Que.
*The Bennett & Wright Co., Ltd., Toronto, Ont.

BUCKLES, shoe and coat
Parmenter & Bulloch Co., Limited, Gananoque, Ont.

BUILDING FELT AND PAPER
*Beveridge Paper Co., Ltd., Montreal.
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.
*The Barrett Co., Ltd.. Toronto and Montreal.

BUNGS, wooden for barrels
Wm. H. White, Ville St. Pierre, Montreal, Que.

BURLAPS
The Canadian Bag Co., Limited, Montreal, Que.

BURLAPS, decorative
Dominion Oil Cloth Co., Limited, Montreal, Que.

CABLES, electric light, power, telephone and telegraph
*Northern Electric Company, Limited, Montreal, Que.
*Standard Underground Cable Co. of Canada, Ltd,, Hamilton, Ont.

CABLES, transmission and telephones
*Northern Electric Company, Limited, Montreal, Que.

CABLES, transmission and cable
*Northern Electric Co., Ltd., Montreal, Que.

CABLES, wire
*The Dominion Wire Rope Co., Ltd., Montreal, Que.
*The B. Greening Wire Co., Ltd., Hamilton, Ont.

CALENDARS, ADVERTISING NOVELTIES, etc.
Lawson & Jones, Ltd., London.

CAMERAS
Canadian Kodak Co., Ltd., Toronto, Ont.

CAMPERS' OUTFITTERS
Slingsby Mfg. Co., Ltd., Brantford, Ont.

CANADA SILVER
*Brown's Copper and Brass Rolling Mills, Ltd., New Toronto.

CANOES
Peterboro Canoe Co., Ltd., Peterboro, Ont.

CANS, baking powder, etc.
American Can Co., Montreal (Que.) and Hamilton (Ont.).
A. R. Whittall Can. Co., Ltd., Montreal, Que.
*MacDonald Mfg. Co., Ltd., Toronto, Ont.

CANS, fruit
American Can Co., Montreal (Que.) and Hamilton (Ont.).
A. R. Whittall Can. Co., Ltd., Montreal, Que.
*MacDonald Mfg. Co., Ltd., Toronto, Ont.

CANS, iron, lead and putty
A. R. Whittall Can. Co., Ltd., Montreal, Que.

CANS, tin
A. R. Whittall Can Co., Ltd., Montreal, Que.
American Can Co., Montreal (Que.) and Hamilton (Ont.).
*MacDonald Mfg. Co., Ltd., Toronto, Ont.

CAPS, cloth
John W. Peck & Co., Ltd., Montreal, Que.

CARBIDE
*Canada Carbide Co., Ltd., Montreal, Que.

CARBONS, electric
*Canadian National Carbon Co., Ltd., Toronto, Ont.

CARBONIC ACID GAS
*Canadian Carbonate Co., Montreal.

CARD RECORD SYSTEMS
Lowe-Martin Co., Ltd., Ottawa, Ont.
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

CARPETS AND RUGS
Toronto Carpet Mfg. Co., Limited, Toronto.

CARPET FELTS, plain and corrugated
*Beveridge Paper Co., Ltd.. Montreal. Supply Department.

CARRIERS
*Richards-Wilcox Canadian Co., Ltd., London, Ont.

CARRIERS, box and barrel
*Canadian Mathews Gravity Carrier.

CARRIERS, brick
*Canadian Mathews Gravity Carrier Co., Limited, Toronto.
*Richards-Wilcox Canadian Co., Ltd., London, Ont.

CARS
*National Steel Car Co., Ltd., Hamilton, Ont.

CARS, industrial
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.

CARTONS, lithographed
Harris Lithographing Co., Ltd., Toronto, Ont.

CASTINGS, Alloy
*The Electric Steel & Metals Co., Ltd., Welland, Ont.

CASTINGS, aluminum, brass and bronze
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
*Tallman Brass & Metal Co., Hamilton, Ont.

CASTINGS, grey iron
*Canadian Rumely Co., Ltd., Toronto. Ont.
*Dodge Mfg. Co., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt. Ont.
*Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

CASTINGS, malleable iron
*Galt Malleable Iron Co., Ltd.. Galt, Ont.

CASTINGS, steel
Beauchemin & Fils, Ltd., Sorel, Que.
*Canadian Steel Founderies, Ltd.. Montreal, Que.
*Dominion Foundries and Steel Co., Ltd., Hamilton, Ont.
*Electric Steel & Metals Co., Ltd.. Welland, Ont.
*Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

CATALOGUE MAKERS
Grip, Ltd., Toronto, Ont.

CATALOGUE COVERS, by new lithographing process
Harris Lithographing Co., Ltd.. Toronto, Ont.

CAUSTIC SODA
*Canadian Salt Co., Ltd., Windsor.

CELLBOARD
*Adams Cellboard Co., Toronto.

CEMENTS, High Temp.; plastic, liquid
*Beveridge Paper Co., Ltd., Montreal, Supply Department.

CENTRIFUGAL PUMPS
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

CHAINS, for elevators, conveyors and drives
*Canadian Link-Belt Co., Toronto.

CHAIRS
*Office Specialty Mfg. Co., Ltd. Newmarket, Ont.

CHAIRS, assembly hall
Stratford Mfg. Co., Ltd., Stratford, Ont.

CHAIRS, folding
Stratford Mfg. Co., Ltd., Stratford, Ont.

CHAIRS, rattan and upholstered
Imperial Rattan Co., Ltd., Stratford. Ont.

CHEMICALS
Canadian Laboratory Supplies, Ltd., Toronto, Ont.
*The Grasselli Chemical Co., Ltd.. Toronto, Ont.
*The Nichols Chemical Co., Ltd.. Montreal, Que.

CHEMISTS, industrial
*Milton Hersey Co., Montreal.

CHICLETS AND CHEWING GUM
Canadian Chewing Gum Co., Ltd.. Toronto, Ont.

CIRCULAR CUTTERS, solid steel
*Galt Knife Co., Ltd.
The Peter Hay Knife Co., Ltd., Galt, Ont.

CIRCULAR SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.

CLAM SHELL BUCKETS
*Canadian Mead Morrison Co., Ltd., Montreal, Que.

CLAY, Ground.
*Interprovincial Brick Co. of Canada, Limited, Toronto.

CLOCKS, time
*International Business Machines Co., Ltd., Toronto.

CLOCKS, watchmen's
*The Bennett & Wright Co., Ltd., Toronto, Ont.

CLOSET SEATS
*Goderich Organ Co., Goderich,Ont.

CLOTHING
John W. Peck & Co., Ltd., Montreal. Que.

CLOTHING, leather and sheepskin lined coats
*A. R. Clarke & Co., Ltd.. Toronto

CLOTHING, Mackinaw
The Carss Mackinaw Clothing Co., Ltd., Orillia, Ont.

CLOTHES LINES, cotton
Hamilton Cotton Co., Hamilton, Ont.

CLUTCHES
*Dodge Mfg. Co., Ltd., Toronto.

CLUTCHES, conveyors
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

COAL
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.
Standard Fuel Co., Toronto, Ont.

COBALT OXIDE
*Deloro Smelting & Refining Co., Ltd., Deloro, Ont.
The Coniagas Reduction Co., Ltd., St. Catharines, Ont.

COBALT METAL
*Deloro Smelting & Refining Co., Ltd., Deloro, Ont.

COFFEE
S. H. Ewing & Sons, Montreal.

COLD DRAWN SHAPES, flats, squares and hexagons
*The Canadian Drawn Steel Co., Ltd., Hamilton, Ont.
*Union Drawn Steel Co.. Ltd. Hamilton, Ont.

COLD STORAGE DOORS
John Hillock & Co., Ltd., Toronto.

COLLAR BUTTONS
The Arlington Co. of Canada, Ltd., Toronto, Ont.

COLLARS, coated linen
Parsons & Parsons Canadian Co., Hamilton, Ont.

COLORS
*A. Ramsay & Son Co., Montreal.

COMBS, fine dressing and name
The Arlington Co. of Canada, Ltd., Toronto, Ont.

COMMERCIAL STATIONERY
*Brown Bros., Ltd., Toronto, Ont.

CONCRETE COATINGS, PAINTS, Etc.
*The Imperial Varnish & Color Co., Ltd., Toronto, Ont.

CONCRETE HARDENER AND WATERPROOFER
*Beveridge Paper Co., Ltd., Montreal, Supply Department.
Sturgeons Limited, Toronto.

CONDUITS FOR INTERIOR WIRING
*Conduits Co., Ltd.. Toronto, Ont.

CONDENSERS, Barometic
Canadian Ingersoll-Rand Co., Ltd.. Sherbrooke, Que.

CONFECTIONERY
Ganong Bros., Ltd., St. Stephens, N.B.
Moirs, Ltd., Halifax, N.S.
The Montreal Biscuit Co., Montreal, Que.

CONTAINER BOARD—strong container
*Bathurst Lumber Co., Ltd., Bathurst, N.B.

CONTRACTOR'S PLANT
*Canadian Mead Morrison Co., Ltd., Montreal, Que.

CONVEYORS
*Canadian Link-Belt Co., Toronto.
*Canadian Mathews Gravity Carrier Co., Toronto.
*Dodge Mfg. Co., Ltd., Toronto.

COPPER
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
*Consolidated Mining & Smelting Co. of Canada, Ltd., Montreal.

COPPER, SHEETS, PLATES, BARS, RODS
*Brown's Copper and Brass Rolling Mills, Ltd., New Toronto, Ont.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
*Tallman Brass & Metal Co., Hamilton, Ont.
*Dominion Copper Products Co., Ltd., Montreal, Que.

COPPERSMITHS
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.

COPPER TUBING, seamless
*Dominion Copper Products Co., Ltd., Montreal, Que.
Canadian Seamless Wire Co., Ltd., Toronto, Ont.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.

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COPPER WIRE
Canadian Seamless Wire Co., Ltd., Toronto, Ont.
*Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.

CORKS
S. H. Ewing & Sons, Montreal, Que.

CORK CARPET
Dominion Oil Cloth Co., Ltd., Montreal, Que.

CORRUGATED PAPER BOXES
*Adams Cellboard Co., Toronto.
Corrugated Paper Box Co., Ltd., Toronto, Ont.
*Hinde & Dauch Paper Co. of Canada, Limited, Toronto.
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.

CORSETS
Dominion Corset Co., Quebec, Que.

COTTONS
*Montreal Cottons, Ltd., Valleyfield, P.Q.

COTTONADES
Hamilton Cotton Co., Hamilton, Ont.

COUPLERS
*Canadian Steel Foundries, Ltd., Welland, Ont.

COUPLINGS
*Dodge Mfg. Co., Ltd., Toronto.

CRANES
*Northern Crane Works, Walkerville, Ont.
*The Herbert Morris Crane and Hoist Co., Ltd., Niagara Falls, Ont.

CRANKSHAFTS
Canada Forge Co., Ltd., Welland, Ont.

CREAM CHEESE, Ingersoll
The Ingersoll Packing Co., Ltd., Ingersoll, Ont.

CREAM SEPARATORS AND MILK CLARIFIERS
De Laval Dairy Supply Co., Peterboro, Ont.

CREAMERY AND CHEESE FACTORY MACHINERY AND SUPPLIES
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

CREOSOTED MATERIALS
*The Barrett Co., Ltd., Toronto and Montreal.

CRUSHERS, Rock and Ore
Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.

CUPOLAS
*Northern Crane Works, Ltd., Walkerville, Ont.

CUPS, presentation
Standard Silver Co., Toronto, Ont.

CURTAINS, chenille
Hamilton Cotton Co., Hamilton, Ont.

CUTLERY
Standard Silver Co., Toronto, Ont.

CUTTERS, machine
*Pratt & Whitney Co., Dundas, Ont.

DECALCOMANIA TRANSFERS
Canada Decalcomania Co., Toronto, Ont.

DENIMS
Hamilton Cotton Co., Hamilton, Ont.

DERAILS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

DESIGNERS AND PRINTERS OF BOOKLETS, Etc.
Grip, Ltd., Toronto, Ont.

DESKS
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

DESICCATED VEGETABLES
Grahams, Ltd., Belleville, Ont.

DINING ROOM SUITES
The George McLagan Furniture Co., Ltd., Stratford, Ont.

DIES
*Butterfield & Co., Rock Island, P.Q.
*Pratt & Whitney Co., Dundas, Ont.

DISINFECTING APPARATUS
Spramotor Co., London, Ont.

DOOR HANGERS
*Richards Wilcox Canadian Co., Ltd., London, Ont.

DREDGES
*Canadian Mead Morrison Co., Ltd., Montreal, Que.

DRESSING, belt
Sadler & Haworth, Montreal, Que.

DRILL PRESSES
*Canada Machinery Corporation, Ltd., Galt, Ont.

DRILL SHARPENERS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

DRILLS
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.
*Pratt & Whitney Co., Dundas, Ont.

DRILLS, Square or Hexagon
Globe Engineering Co., Limited. Hamilton, Ont.

DRIFT BOLTS OR SPIKES
London Rolling Mill Co., Ltd., London, Ont.

DROP FORGINGS.
*Canadian Billings & Spencer, Ltd., Welland, Ont.

DROP HAMMERS
*Canada Machinery Corporation, Ltd., Galt, Ont.

DRUMS, steel, and containers
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.

DRY COLORS
*The Imperial Varnish & Color Co., Ltd., Toronto.
R. C. Jamieson & Co., Ltd., Montreal, Que.
Standard Paint & Varnish Co., Ltd., Windsor, Ont.

DUMB WAITERS
Turnbull Elevator Mfg. Co., Toronto, Ont.

DURABLE WIRE ROPE
*The Dominion Wire Rope Co., Ltd., Montreal, Que.

DYNAMITE
Canadian Explosives, Ltd., Montreal, Que.

DYNAMOS
*Jones & Moore Electric Co., Ltd., Toronto, Ont.
*The Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.

DYNAMOS, plating
*Jones & Moore Electric Co., Ltd., Toronto, Ont.

EIDERDOWN
Galt Knitting Co., Ltd., Galt, Ont.

ELECTRIC APPLIANCES
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.
*Canadian Westinghouse Co., Ltd., Hamilton, Ont.

ELECTRICAL COMPOUNDS
Standard Paint Co. of Canada, Ltd., Montreal, Que.

ELECTRIC PLATE WARE
Roden Bros., Ltd., Toronto, Ont.

ELECTRODES, carbon
*Canadian National Carbon Co., Ltd., Toronto, Ont.

ELECTROTYPING
Central Press Agency, Ltd., Toronto.

ELECTRICAL SUPPLIES
*Canadian Westinghouse Co., Ltd., Hamilton, Ont.
*Jones & Moore Electric Co., Ltd.,
*Northern Electric Co., Ltd., Montreal, Que.

ELECTRO-SILVER PLATED WARE
Standard Silver Co., Toronto, Ont.

ELEVATING MACHINERY
*Canadian Link-Belt Co., Toronto.
*Canadian Mathews Gravity Carrier Co., Toronto, Ont.

ELEVATORS
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
Turnbull Elevator Mfg. Co., Toronto, Ont.
*The Waterous Engine Works Co., Ltd,, Brantford, Ont.
*Northern Crane Works, Ltd., Walkerville, Ont.

ELEVATORS FOR ALL PURPOSES
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

ELEVATOR GATES AND DOORS
Turnbull Elevator Mfg. Co., Ltd., Toronto, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.

ELEVATOR GUARDS
*The Geo. B. Meadows, Toronto.
Iron & Brass Goods Works Co., Ltd., Toronto, Ont.
*Canada Wire and Iron Goods Co., Hamilton, Ont.

EMERY GRINDERS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

EMERY WHEELS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

ENAMELS
R. C. Jamieson & Co., Ltd., Montreal, Que.
*The Imperial Varnish & Color Co., Ltd., Toronto, Ont.

ENAMEL MANUFACTURERS AND DECORATORS
Standard Paint & Varnish Co., Ltd., Windsor, Ont.

ENAMEL AND TIN WARE
*McClary Mfg. Co., London, Ont.

ENGINES
*E. Leonard & Sons, Limited, London, Ont.
*Goldie & McCulloch Co., Ltd., Galt, Ont.
J. & R. Weir, Montreal, Que.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

ENGINES, gas and gasoline
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*Hamilton Motor Works, Ltd., Hamilton, Ont.
*Massey-Harris Co., Ltd., Toronto.

ENGINES, gasoline, tractor, plowing and threshing
Sawyer-Massey Co., Ltd., Hamilton, Ont.

ENGINES, hoisting
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
*Canadian Mead Morrison Co., Ltd., Montreal, Que.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

ENGINES, marine, gasoline and kerosene
Bruce, Stewart & Co., Ltd., Charlottetown, P.E.I.

ENGINES, steam plowing and threshing
Sawyer-Massey Co., Ltd., Hamilton, Ont.

ELECTRICAL AND GAS FIXTURES
The Garth Co., Montreal, Que.
The James Morrison Brass Mfg. Co., Ltd., Toronto, Ont.
*Tallman, Brass & Metal Co., Hamilton, Ont.

ENGRAVERS, photo
Grip, Ltd., Toronto, Ont.

ENGRAVERS, half-tone
Grip, Ltd., Toronto.

ENGRAVERS AND PRINTERS steel plate
American Bank Note Co., Ottawa, Ont.

ENGRAVERS AND PRINTERS bank note
American Bank Note Co., Ottawa, Ont,

ENGRAVING
*J. L. Jones Engraving Co., Toronto, Ont.

ENGRAVING, copper and steel plate
Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

ENSILAGE AND STRAW CUTTERS
J. Fleury's Sons, Aurora, Ont.
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.

EVAPORATED APPLES
Grahams, Ltd., Belleville, Ont.

ENVELOPES
*Barber-Ellis Co., Ltd., Toronto.
Canada Envelope Co., Montreal, Que.

EXCELSIOR PADS
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

EXPERTS IN PATENT CAUSES
Ridout & Maybee, Toronto, Ont.

EXPLOSIVES, high
Canadian Explosives, Ltd., Montreal, Que.

FACE PLATE JAWS
Ker & Goodwin, Brantford, Ont.

FACTORY SUPPLIES, cheese and creamery
De Laval Dairy Supply Co., Ltd., Montreal, Que.

FANS
*The Canadian Blower & Forge Co., Ltd., Kitchener, Ont.

FARM POWER & LIGHT PLANTS
*Northern Electric Company, Limited, Montreal, Que.

FENCING, wire
*C. H. Johnson & Sons, Ltd., Montreal, Que.

FELTS, pulp and paper makers
Ayers, Ltd., Lachute Mills, P.Q.
*Beveridge Paper Co., Ltd., Montreal, Que.

FENCES AND GATES
*Dennis Wire & Iron Works Co., London, Ont.
*Canada Wire & Iron Goods Co., Hamilton, Ont.

FIBRE PAILS
*The E. B. Eddy Co., Ltd., Hull, Que.

FIBRE, Vulcanized
*Beveridge Paper Co., Ltd., Montreal, Supply Department.

FIBRE (vulcanized), sheets, rods, tubes, etc.
The Diamond State Fibre Co. of Canada, Ltd., Toronto.

FIBREBRICK, Plastic, jointless
*Beveridge Paper Co., Ltd., Montreal, Supply Department.

FILES
Henry Disston & Sons, Ltd., Toronto, Ont.
*The Nicholson File Co., Port Hope.

FILING CABINETS
*Office Specialty Co., Newmarket, Ont.

FILING EQUIPMENT, wood & steel
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

FILING SYSTEMS
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.
Lowe-Martin Co., Ltd., Ottawa, Ont.

FIRE ALARMS
*Northern Electric Co., Ltd., Montreal, Que.

FIRE BRICK
Dominion Fire Brick & Clay Products, Ltd., Moose Jaw, Sask.

FIRE BRICK AND CLAY
Dominion Fire Brick & Clay Products, Ltd., Moose Jaw, Sask.

FIRE BRICK, PLASTIC
Beveridge Paper Co., Ltd., Montreal, Que.

FIRE DOOR HARDWARE
*Richard Wilcox Canadian Co., Ltd., London, Ont.

FIRE DOORS
*A. B. Ormsby Co., Ltd., Toronto.
*The Pedlar People, Ltd., Oshawa, Ont.

FIRE ENGINES
*Waterous Engine Works Co., Ltd., Brantford, Ont.

FIRE ESCAPES
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
*McGregor & McIntyre, Ltd., Toronto, Ont.

FIRE EXTINGUISHERS
*A. B. Ormsby Co., Ltd., Toronto.
*Booth-Coulter Copper & Brass Co., Ltd., Montreal, Que.
*The Bennett & Wright Co., Ltd., Toronto, Ont.

FIRE FIGHTING APPARATUS
*Waterous Engine Works Co., Ltd., Brantford, Ont.

FIRE HOSE
*Canadian Consolidated Rubber Co. of Canada, Ltd., Montreal, Que.
*Gutta Percha & Rubber, Ltd., Toronto, Ont.

FIRE PREVENTION MATERIAL
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*Eureka Mineral Wool & Asbestos Co., Toronto.
*The Bennett & Wright Co., Ltd., Toronto, Ont.

FIRE PROOF WINDOWS AND DOORS
*A. B. Ormsby Co., Ltd., Toronto.
*Pedlar People, Ltd., Oshawa, Ont.

FIRE PROTECTION SYSTEMS
*Canadian Des Moines Steel Co., Limited, Chatham.

FIRE SPRINKLER SYSTEMS
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*The Bennett & Wright Co., Ltd., Toronto, Ont.
*Purdy Mansell Co., Toronto, Ont.

FIRE AND WATER DEPARTMENT
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
The Garth Co., Montreal, Que.

FISH, Atlantic Sea-Foods
Maritime Fish Corporation, Ltd., Montreal, Que.

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FITTINGS FOR SOIL PIPE
Anthes Foundry, Ltd., Toronto.
FITTINGS, steam
Warden King Ltd., Montreal, Que.
FLOORING, hardwood
Seaman Kent Co., Ltd., Meaford, Ont.
FORGES
*Canadian Blower & Forge Co., Ltd., Kitchener, Ont.
FORGINGS
Canada Forge Co., Ltd., Welland, Ont.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
FORGINGS, drop
*Canadian Billings & Spencer, Ltd., Welland, Ont.
*Dominion Forge & Stamping Co., Walkerville, Ont.
FOUNDRY EQUIPMENT
*Northern Crane Works, Ltd., Walkerville, Ont.
FOUNTAIN FRUITS AND JUICES
J. J. McLaughlin, Ltd., Toronto.
FRICTION CLUTCH PULLEYS
*Dodge Mfg. Co., Ltd., Toronto.
FROGS AND CROSSINGS, manganese
Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.
FUEL
Standard Fuel Co., Toronto, Ont.
FUR GARMENTS, men's and women's
Holt, Renfrew, Ltd., Quebec.
FUR GOODS
John W. Peck & Co., Ltd., Montreal, Que.
FURNACES
*McClary Mfg. Co., London, Ont.
FURNITURE, hall
The George McLagan Furniture Co., Ltd., Stratford, Ont.
FURNITURE, office
The Canadian Office & School Furniture Co., Ltd., Preston, Ont.
FURNITURE, reed and rattan
Imperial Rattan Co., Ltd., Stratford, Ont.
FUSES
*Economy Fuse & Mfg. Co., Montreal, Que.
GALVANIZED IRON
*A. C. Leslie & Co., Montreal.
GALVANIZED SHEETS
*Dominion Sheet Metal Co., Hamilton, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.
GALVANIZERS
Acme Stamping & Tool Works, Ltd., Hamilton, Ont.
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.
*The Pedlar People, Ltd., Oshawa.
GASOLINE ENGINES
*Ontario Wind & Pump Co., Ltd., Toronto, Ont.
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.
GASOLINE FIRE ENGINES
*Waterous Engine Works Co., Ltd., Brantford, Ont.
GASOLINE STORAGE SYSTEMS, special underground
*S. F. Bowser & Co., Toronto.
*Steel Trough & Machine Co., Ltd., Tweed, Ont.
GASOLINE
*The Imperial Oil Co., Ltd., Toronto, Ont.
GAUGES
*Brown Engineering Corporation, Toronto, Ont.
GEARS, cut
*Brown Engineering Corporation, Toronto, Ont.
*Hamilton Gear and Machine, Toronto.
GELATINE
Canada Gelatine Co., Ltd., Brantford, Ont.
GENERATORS
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.
*Canadian Westinghouse Co., Ltd., Hamilton, Ont.
GILDING METAL
*Dominion Copper Products Co., Ltd., Montreal, Que.
GLASSWARE
Dominion Glass Co., Ltd., Montreal, Que.
GLASSWARE, cut
Roden Bros., Ltd., Toronto.
GLASS FOR BUILDINGS
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
GLASS BENDERS
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
GLASS, mirror
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
GLOVES AND MITTS
*A. R. Clarke & Co., Ltd., Toronto.
Craig, Cowan Co., Ltd., Toronto.
GLUE
Canada Glue Co., Ltd., Brantford, Ont.
GOLD-FILLED WIRE AND PLATE
Canadian Seamless Wire Co., Toronto, Ont.
GOLD AND SILVER REFINERS
Canadian Seamless Wire Co., Toronto, Ont.
GRAIN CRUSHERS, rapid, easy
J. Fleury's Sons, Aurora, Ont.
GRAPE JUICE
J. J. McLaughlin, Ltd., Toronto.
The Welch Co., Ltd., St. Catharines. Ont.
GRAPHITE, lubricating
Black Donald Graphite Company, Limited, Calabogie, Ont.
GRATES
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
GRATES, revolving, anticlinker
*Beveridge Paper Co., Ltd., Montreal, Supply Department.
GRAVITY CARRIERS
*Canadian Mathews Gravity Carrier Co., Toronto, Ont.
GRILLES, metal
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
GRINDING AND POLISHING MACHINERY
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
GRINDING WHEELS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
*The Dominion Abrasive Wheel Co., Ltd., New Toronto, Ont.
GRINDSTONES
*Richards-Wilcox Canadian Co., Ltd., London, Ont.
GUNN SECTIONAL BOOKCASES
The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.
GUY ANCHORS
B. J. Coghlin Co., Ltd., Montreal.
GYPSUM PRODUCTS
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.
HACK SAW BLADES AND FRAMES
*E. C. Atkins & Co., Inc., Hamilton, Ont.
HACK SAW MACHINES
*E. C. Atkins & Co., Inc., Hamilton, Ont.
HALL FURNITURE
The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.
HAMS
F. W. Fearman Co., Ltd., Hamilton, Ont.
HANDLES (axe, pick, sledge hammers, etc.)
The Lachute Shuttle Co., Ltd., Lachute Mills, P.Q.
HANDLES, wood
Canada Spool & Bobbin Co., Ltd., Walkerton, Ont.
HAND SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.
HANGERS
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
HARDWARE
*Richards-Wilcox Canadian Co., Ltd., London, Ont.
Taylor-Forbes Co., Ltd., Guelph, Ont.
HARNESS
Lamontagne, Ltd., Montreal, Que.
HATS, ladies' felt and straw
Toronto Hat Mfg. Co., Toronto.
HAULAGE, wire rope
*The Dominion Wire Rope Co., Ltd., Montreal, Que.
HEADING SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.
HEATERS
*Waterous Engine Works Co., Ltd., Brantford, Ont.
HEATERS, feed water
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
HEATERS, WATER FEED
*Mason Regulator & Engineering Co., Ltd., Montreal, Que.
HEATING APPLIANCES
*C. A. Dunham Co., Ltd., Toronto.
*The Canadian Blower & Forge Co., Ltd., Kitchener, Ont.
HEATING SYSTEMS
*C. A. Dunham Co., Ltd., Toronto.
HEMLOCK, union and oak sole
Breithaupt Leather Co., Ltd., Kitchener, Ont.
HESSIANS
The Canadian Bag Co., Ltd., Montreal, Que.
HINGES
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
HOISTS, electric and pneumatic
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
*Canadian Mead Morrison Co., Ltd., Montreal, Que.
*Northern Crane Works, Ltd., Walkerville, Ont.
HOSE, fire and rubber
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Gutta Percha & Rubber, Ltd., Toronto, Ont.
HOUSES, factory made
Wm. H. White, Ville St. Pierre, Montreal, Que.
HYDRAULIC TURBINES
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
ICE CREEPERS
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.
ICE-MAKING MACHINERY
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.
INGOT METALS
*Brown's Copper & Brass Rolling Mills, Ltd., New Toronto, Ont.
INSERTED TOOTH SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.
INSULATING COMPOUNDS
*The Imperial Varnish & Color Co., Ltd., Toronto.
INSULATING PAPERS
*Beveridge Paper Co., Ltd., Montreal, Supply Department.
INSULATION VULCANIZED FIBRE
The Diamond State Fibre Co. of Canada, Ltd., Toronto.
INTERLOCKING RUBBER TILING
*Gutta Percha & Rubber Mfg. Co., of Toronto, Ltd., Toronto, Ont.
IRON
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.
IRON AND STEEL BARS
*Burlington Steel Co., Ltd., Hamilton, Ont.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
IRON STAIRWAYS
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
*McGregor & McIntyre, Ltd., Toronto, Ont.
IRONWORK, architectural
*Canada Wire & Iron Goods Co., Hamilton, Ont.
IRONWORK, ornamental
*Canada Wire & Iron Goods Co., Hamilton, Ont.
JACKS
Globe Engineering Co., Ltd., Hamilton, Ont.
JAM, canned goods, etc.
E. D. Smith & Son, Ltd.
JAPANS, enamels, etc.
A. Muirhead Co., Ltd., Toronto.
*The Imperial Varnish & Color Co., Ltd., Toronto, Ont.
JIGS AND TOOLS
*Brown Engineering Corporation, Toronto, Ont.
JOINTERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
JELLY POWDER
S. H. Ewing & Sons, Montreal.
JEWELRY, enamelled souvenir
*Caron Bros., Montreal, Que.
JEWELRY, gold-filled
*Caron Bros., Montreal, Que.
JOIST HANGERS
*Richards-Wilcox Canadian Co., Ltd., London, Ont.
JUNCTION BOXES, cable
*Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.
KINDLING
Standard Fuel Co., Toronto, Ont.
KNIFE GRINDERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
KNITTED GOODS
*Penman's, Ltd., Paris, Ont.
KNIVES
*Galt Knife Co., Ltd.
The Peter Hay Knife Co., Ltd., Galt, Ont.
Simonds Canada Saw Co., Ltd., Montreal, Que.
KNIVES, pulp and paper
Henry Disston & Sons, Toronto.
The Peter Hay Knife Co., Ltd., Galt, Ont.
KODAKS AND PHOTOGRAPHIC SUPPLIES
Canadian Kodak Co., Ltd., Toronto.
LABELS
Lawson & Jones, Ltd., London, Ont.
LABELS, lithographed
Harris Lithographing Co., Ltd., Toronto, Ont.
LABORATORY SUPPLIES
Canadian Laboratory Supplies, Ltd., Toronto.
LACE LEATHER
F. C. McCordick, St. Catharines, Ont.
*The D. K. McLaren Belting Co., Ltd., Montreal, Que.
*The J. C. McLaren Belting Co., Ltd., Montreal, Que.
LADDERS
Stratford Mfg. Co., Ltd., Stratford, Ont.
LADLES, foundry
*Northern Crane Works, Ltd., Walkerville, Ont.
LARD
F. W. Fearman Co., Ltd., Hamilton, Ont.
LATH
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.
LATHE CHUCKS
Ker & Goodwin, Brantford, Ont.
LATHE-DOGS
Canadian Billings & Spence, Ltd. Welland, Ont.
LATHES
*Canada Machinery Corporation, Ltd., Galt, Ont.
LAUNCHES
Peterboro Canoe Co., Ltd., Peterboro, Ont.
LAWN MOWERS
Taylor-Forbes Co., Ltd., Guelph, Ont.
LAWN SWINGS
Stratford Mfg. Co., Ltd., Stratford, Ont.
LAVATORIES, enameled
Amherst Foundry Co., Ltd., Amherst, N.S.
LAUNDRY SINKS
Amherst Foundry Co., Ltd., Amherst, N.S.
LEAD
*Consolidated Mining & Smelting Co. of Canada, Ltd., Montreal.
LEAD GRINDERS
Benjamin Moore & Co., Ltd., Toronto, Ont.
LEAD PIPE
*Hoyt Metal Co., Toronto, Ont.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
*The Canada Metal Co., Toronto.
LEAD SHEET
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
LEATHER
The Robson Leather Co., Ltd., Oshawa, Ont.
LEATHER, bookbinders'
Clarke & Clarke, Ltd., Toronto.
LEATHER, fancy
Clarke & Clarke, Ltd., Toronto.
LEATHER GOODS
Lamontagne, Ltd., Montreal, Que.

*For Display Advertisement see Index, Page 53

LEATHER, hemlock, union and oak sole
The Breithaupt Leather Co., Ltd., Kitchener, Ont.
LEATHER, patent colt and side leather
*A. R. Clarke & Co., Ltd., Toronto.
LEATHER, sheep skin, etc.
Clarke & Clarke, Ltd., Toronto.
LEATHER, upholstering
Clarke & Clarke, Ltd., Toronto.
LEATHER, upper
A. Davis & Son., Ltd., Kingston, Ont.
King Brothers Co., Ltd., Whitby, Ont.
LINK BELT, Ewart, and sawmill rivetted
*Canadian Link-Belt Co., Toronto.
LINK BELTING
*The Dodge Mfg. Co., Ltd., Toronto, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
LINOLEUM
Dominion Oil Cloth Co., Ltd., Montreal, Que.
LITHOGRAPHERS
American Bank Note Co., Ottawa, Ont.
Harris Lithographing Co., Ltd., Toronto, Ont.
LOCKERS
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
*Geo. B. Meadows, Wire, Iron and Brass Works Co., Toronto. Ont.
LOCOMOTIVES, industrial
*Montreal Locomotive Works, Ltd., Montreal, Que.
LOCOMOTIVE & MARINE BRASS WORKS
The James Morrison Brass Mfg. Co., Ltd., Toronto.
LOOSE LEAF SYSTEMS
Copeland-Chatterson Co., Ltd., Brampton, Ont.
Lowe-Martin Co., Ottawa, Ont.
LUGS, for silos and water tanks
*Ontario Wind Engine & Pump Co., Ltd., Toronto.
LUMBER
*Brown Corporation, La Tuque, Que.
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.
G. & J. Esplen, Montreal, Que.
LUMBER, asbestos
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.
LUMBER, spruce and pine, cedar railway ties and shingles
*Bathurst Lumber Co., Ltd., Bathurst, N.B.
LUMBER, red pine and spruce
Gillies Bros., Ltd., Braeside, Ont.
LUMBER, White pine
Gillies Bros., Ltd., Braeside, Ont.
LUMBERING BLANKETS
Slingsby Mfg. Co., Ltd., Brantford, Ont.
MACHINE KNIVES
*Galt Knife Co., Ltd.
*E. C. Atkins & Co., Inc., Hamilton, Ont.
Henry Disston & Sons, Toronto.
MACHINE TOOLS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.
MACHINE WORK, special and repairs
*Canadian Rumely Co., Ltd., Toronto, Ont.
MACHINERY AND UTENSILS FOR BAKERS
Fletcher Mfg. Co., Ltd., Toronto.
MACHINERY AND UTENSILS FOR CANDY
Fletcher Mfg. Co., Ltd., Toronto.
MACHINERY AND UTENSILS FOR ICE CREAM
Fletcher Mfg. Co., Ltd., Toronto.
MACHINERY, conveying
*Canadian Link-Belt Co., Toronto.
*Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
MACHINERY, flour mill
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
MACHINERY, ice cream
J. J. McLaughlin, Ltd., Toronto.
MACHINERY, grinding
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
Canadian Mead Morrison Co., Ltd., Montreal, Que.
J. & R. Weir, Montreal, Que.
*Northern Crane Works, Ltd., Walkerville, Ont.
MACHINERY, iron working
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.
MACHINERY, pulp mill
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
MACHINERY, punching and shearing
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.
MACHINERY, railroad and car-shop
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.
MACHINERY, roadmaking
Sawyer-Massey Co., Ltd., Hamilton, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
MACHINERY, sawmill
The E. Long Mfg. Co., Ltd., Orillia, Ont.
P. Payette & Co., Pentanguishene, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
*Yates, P. B., Machine Co., Ltd., Hamilton, Ont.
MACHINERY, sheet metal working
Brown, Boggs Co., Ltd., Hamilton, Ont.
*Canada Machinery Corporation, Ltd., Galt, Ont.
MACHINERY, transmission
*Dodge Mfg. Co., Ltd., Toronto.
*Goldie & McCulloch Co., Ltd., Galt, Ont.
MACHINERY, woodworking
*Canada Machinery Corporation, Ltd., Galt, Ont.
*Yates, P. B., Machine Co., Ltd., Hamilton, Ont.
Preston Woodworking Machinery Co., Ltd., Preston, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
MACHINE WRENCHES
*Canadian Billings & Spencer, Ltd., Welland, Ont.
MACHINES, painting
Spramotor Co., London, Ont.
MAGNESITE
*Canadian Carbonate Co., Montreal, Que.
MALLEABLE IRON CASTINGS
*Galt Malleable Iron Co., Ltd., Galt, Ont.
MAPLE PRODUCTS
*Maples, Ltd., Toronto, Ont.
MARTINGALE RINGS AND SLIDE LOOPS
The Arlington Co. of Canada, Ltd., Toronto, Ont.
MATCHERS
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
MATCHES
*The E. B. Eddy Co., Ltd., Hull, Que.
MECHANICAL STOKERS
*The Jones Underfeed Stoker Co., Ltd., Toronto.
METAL, babbitt
*Canada Metal Co., Toronto, Ont.
*Tallman Brass & Metal Co., Hamilton, Ont.
Alonzo W. Spooner, Ltd., Port Hope, Ont.
METAL CEILINGS
*The Pedlar People, Ltd., Oshawa, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.
METAL LATH
*The Pedlar People, Ltd., Oshawa, Ont.
METAL PACKING
*Garlock Packing Co., Hamilton, Ont.
METAL, spinning and stamping
*The Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
METAL PROTECTIVE PAINTS
Sturgeons Limited, Toronto.
METAL SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.
METAL SHINGLES
*The Pedlar People, Ltd., Oshawa, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.
METAL STAMPINGS
Canadian Cartridge Co., Ltd., Hamilton, Ont.
METERS, water
Canadian Cartridge Co., Ltd., Hamilton, Ont.
MILK DEALERS' MACHINERY AND SUPPLIES
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.
MILLBOARD, asbestos
*Eureka Mineral Wool & Asbestos Co., Toronto.
MILLING CUTTERS
*Pratt & Whitney Co. of Canada, Dundas, Ont.
MITTS AND GLOVES, Indian, tan, red deerskins
Holt, Renfrew, Ltd., Quebec, Que.
*A. R. Clarke & Co., Ltd., Toronto.
MIXERS, chocolate, dough and paint
Fletcher Mfg. Co., Ltd., Toronto.
MOCCASINS AND SLIPPERS, Indian tanned leathers
Holt, Renfrew, Ltd., Quebec, Que.
MONEL METAL
International Nickel Co. of Canada, Ltd., Toronto.
MORTISERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
MOTOR CARS
*Ford Co. of Canada, Ford, Ont.
MOTORS, electric (alternating current)
*Canadian Westinghouse Co., Ltd., Hamilton, Ont.
*Jones & Moore Electric Co., Ltd., Toronto, Ont.
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.
*T. & H. Electric Co., Hamilton, Ont.
MOTORS, electric (direct current)
*Canadian Westinghouse Co., Ltd., Hamilton, Ont.
*Jones & Moore Electric Co., Ltd., Toronto, Ont.
*T. & H. Electric Co., Hamilton.
MOTORS, electric (repairing)
*T. & H. Electric Co., Hamilton.
MOULDERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
NAILS
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
NAILS, copper
Parmenter & Bullock Co., Ltd., Gananoque, Ont.
NAILS, wire
Parmenter & Bullock Co., Ltd., Gananoque, Ont.
NAPHTHA
*The Imperial Oil Co., Ltd., Toronto, Ont.
NICKEL CASTINGS
International Nickel Co. of Canada, Ltd., Toronto.
NICKEL METAL
*Deloro Smelting & Refining Co., Ltd., Deloro, Ont.
International Nickel Co. of Canada, Ltd., Toronto.
NICKEL OXIDE
*Deloro Smelting & Refining Co., Ltd., Deloro, Ont.
Coniagas Reduction Co., Ltd., St Catharines, Ont.
International Nickel Co. of Canada, Ltd., Toronto.
NUTS
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.
*The National Acme Mfg. Co., Montreal, Que.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
OAKUM, plumbers, Canadian Navy
Factory Waste & Metal Co., Montreal, Que.
OAT CRUSHERS AND FLAKERS
J. Fleury's Sons, Aurora, Ont.
OFFICE DESKS
*Goderich Organ Co., Goderich, Ont.
OFFICE EQUIPMENT
Lowe-Martin Co., Ltd., Ottawa, Ont.
*Office Specialty Co., Newmarket, Ont.
OFFICE FURNITURE
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.
OILS
*A. Ramsay & Son Co., Montreal, Que.
OIL FILTRATION AND CIRCULATING SYSTEMS
*S. F. Bowser & Co., Toronto, Ont.
OIL STORAGE SYSTEMS, self-measuring
*S. F. Bowser & Co., Toronto, Ont.
OIL COMPANIES
*Canadian Oil Cos., Toronto.
Commercial Oil Co., Ltd., Hamilton, Ont.
*Imperial Oil Co., Toronto.
OILS (petroleum products)
*British American Oil Co., Ltd., Toronto, Ont.
*The Imperial Oil Co., Toronto.
OILS, road
*The Barrett Co., Ltd., Toronto and Montreal.
OILCLOTHS, floor and table
Dominion Oil Cloth Co., Ltd., Montreal, Que.
ORGANS
Casavant Freres, Limitee, St. Hyacinthe, Que.
*Goderich Organ Co., Goderich, Ont.
ORGANS, pipe
Casavant Freres, Limitee, St. Hyacinthe, Que.
ORGANS, parlor
*Goderich Organ Co., Goderich, Ont.
ORNAMENTAL IRON WORK
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
*The Geo. B. Meadows, Toronto Iron & Brass Goods Works Co., Ltd., Toronto, Ont.
*McGregor & McIntyre, Ltd., Toronto, Ont.
OVERALLS
Peerless Overall Co., Rock Island, Que.
Walker Pant & Shirt Co., Walkerville and Chatham, Ont.
OVERCOATINGS
Rosamond Woollen Co., Almonte, Ont.
OVERHEAD RUNWAYS
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
*Richards-Wilcox Canadian Co., Ltd., London, Ont.
OXY-ACETYLENE WELDING
*L'Air Liquide Society, Montreal, Que.
*The Prest-O-Lite Co., Inc., Toronto
OXYGEN
*L'Air Liquide Society, Montreal Que.
PACKING BOXES
Barchard & Co., Ltd., Toronto.
PACKING, engine
*Garlock Packing Co., Hamilton, Ont.
PACKING, rubber
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Gutta Percha & Rubber Mfg. Co. of Toronto, Ltd.
*Jenkins Bros., Ltd., Montreal, Que.
PAILS AND TUBS, wooden
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.
PAINTERS' SUPPLIES
A. Muirhead Co., Ltd., Toronto.
PAINTS
R. C. Jamieson & Co., Ltd., Montreal, Que.
PAINTS AND VARNISHES
A. Muirhead Co., Ltd., Toronto.
Benjamin Moore & Co., Ltd., Toronto, Ont.
*The Imperial Varnish & Color Co., Ltd., Toronto, Ont.
The Staneland Co., Ltd., Victoria, B.C.
*A Ramsay & Sons Co., Montreal, Que.
Standard Paint Co. of Canada, Ltd., Montreal, Que.

* For Display Advertisement see Index, Page 53

PAINTS, preservative
*Beveridge Paper Co., Ltd., Montreal, Supply Department.
Standard Paint Co. of Canada, Ltd., Montreal, Que.
*The Barrett Co., Ltd., Toronto and Montreal.

PAPER, bags, all kinds
*Beveridge Paper Co., Ltd., Montreal.

PAPER BOXES
King Paper Box Co., Ltd., Montreal, Que.

PAPER, coated, book and label
*Provincial Paper Mills, Ltd., Georgetown, Ont.

PAPER, coated box board
*Provincial Paper Mills, Ltd., Georgetown, Ont.

PAPER, coated cover
*Provincial Paper Mills, Ltd., Georgetown, Ont.

PAPER, envelope
*Provincial Paper Mills, Ltd., Georgetown, Ont.
The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, enamelled blotting
*Provincial Paper Mills, Ltd., Georgetown, Ont.

PAPER, label
*Provincial Paper Mills, Ltd., Georgetown, Ont.

PAPER, ledger
*Howard Smith Paper Mills, Ltd., Montreal, Que.
*Rolland Paper Co., Ltd., Montreal, Que.
The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, super-book
The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, writing
The Toronto Paper Mfg. Co., Cornwall, Ont.
*Howard Smith Paper Mills, Ltd., Montreal, Que.
*Rolland Paper Co., Ltd., Montreal, Que.

PAPERS, bond
*Howard Smith Paper Mills, Ltd., Montreal, Que.
*Rolland Paper Co., Ltd., Montreal, Que.

PAPERS, building
*Bathurst Lumber Co., Ltd., Bathurst, N.B.
*The Riordon Pulp & Paper Co., Montreal, Que.
Standard Paint Co. of Canada, Ltd., Montreal, Que.

PARCHMENT PAPER, for wet packing
*Beveridge Paper Co., Ltd., Montreal.

PARK SEATS
Stratford Mfg. Co., Ltd., Stratford, Ont.

PARLOR SUNDRIES
The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.

PATENTS
Fetherstonhaugh & Co., Toronto.
*Ridout & Maybee, Toronto, Ont.
*Harold C. Shipman & Co., Ottawa.

PATENT LITIGATION
*Ridout & Maybee, Toronto, Ont.
*Harold C. Shipman & Co., Ottawa, Ont.

PAY ROLL AUDITS
*International Business Machines, Ltd., Toronto, Ont.

PERFORATED METALS
*Canada Wire & Iron Goods Co., Hamilton, Ont.

PERFORATED MUSIC ROLLS
The Otto Higel Co., Ltd., Toronto.

PERFUMES AND TOILET PREPARATIONS
Sovereign Perfumes, Ltd., Toronto.

PETROLEUM PRODUCTS
*The Imperial Oil Co., Ltd., Toronto, Ont.

PHOTO MAILERS
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.

PIANO ACTIONS
The Otto Higel Co., Ltd., Toronto.

PIANO KEYS
The Otto Higel Co., Ltd., Toronto.

PIANO, player actions
The Otto Higel Co., Ltd., Toronto.

PIANO STOOLS AND BENCHES
*Goderich Organ Co., Goderich, Ont.

PIG IRON
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
*M. A. Hanna & Co., Toronto.

PINS, society, emblems and badges
*Caron Bros., Montreal, Que.

PIPE, cast iron, for water and gas
National Iron Works, Ltd., Toronto, Ont.

PIPE COUPLINGS
*The Steel Co. of Canada, Ltd., Hamilton, Ont.

PIPE COVERINGS
*Eureka Mineral Wood & Asbestos Co., Toronto, Ont.

PIPES, culvert
*The Pedlar People, Ltd., Oshawa, Ont.

PIPE AND NIPPLES, black and galvanized
*Canadian Tube & Iron Co., Ltd., Montreal, Que.

PIPE, sewer
Hamilton & Toronto Sewer Pipe Co., Ltd., Hamilton, Ont.

PIPE, soil and fittings
Anthes Foundry, Ltd., Toronto and Winnipeg.
Warden King Ltd., Montreal, Que.

PISTON RODS
*The Canadian Drawn Steel Co., Ltd., Hamilton, Ont.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.

PLANERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.

PLANING MILLS
G. & J. Esplen, Montreal, Que.

PLASTERING TROWELS
*E. C. Atkins & Co., Inc., Hamilton, Ont.

PLOWS
J. Fleury's Sons, Aurora, Ont.

PLUMBERS' SUPPLIES
The Garth Co., Montreal, Que.
The James Morrison Brass Mfg. Co., Ltd., Toronto, Ont.
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.

PNEUMATIC DRILLS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

POLE LINE MATERIAL (wooden insulator top pins, side blocks, pole steps, cross arms)
The Lachute Shuttle Co., Ltd., Lachute Mills, P.Q.

POLES, flag
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.

PORK PACKERS AND CHEESE EXPORTERS
The Ingersoll Packing Co., Ltd., Ingersoll, Ont.

POWDER, blasting
Canadian Explosives, Ltd., Montreal, Que.

POWER PRESSES
*Hydraulic Machinery Co., Ltd., Montreal, Que.

PRESSES, hydraulic
*The Hydraulic Machinery Co., Limited, Montreal.

PRESSES, sheet metal stamping
Brown, Boggs Co., Ltd., Hamilton, Ont.
*Canada Machinery Corporation, Ltd., Galt, Ont.

PRESSES, veneer
*Canada Machinery Corporation, Ltd., Galt, Ont.

PRINTING AND LITHOGRAPHING
Lawson & Jones, Ltd., London, Ont.

PULLEYS
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

PULLEYS, wood split
*Bernard Industrial Co., Fortierville, P.Q.

PULP, bleached sulphite
*Riordan Sales Co., Ltd., Montreal, Que.

PULP, unbleached sulphite
*Riordan Sales Co., Ltd., Montreal.

PULP, sulphate and sulphite
*Bathurst Lumber Co., Ltd., Bathurst, N.B.

PULP AND PAPER MILL MACHINERY
*The Hydraulic Machinery Co., Limited, Montreal.

PUMPS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*E. Leonard & Sons, Ltd., London, Ont.
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.
Spramotor Co., London, Ont.
*The Electric Steel & Metals Co., Ltd., Welland, Ont.

PUMPS, boiler feed
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

PUMPS, centrifugal
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
*Canadian Mead Morrison Co., Ltd., Montreal, Que.
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
*Dominion Forge & Stamping Co., Ltd., Walkerville, Ont.

PUMPS, hydraulic
*The Hydraulic Machinery Co., Limited, Montreal.

PUMPS, turbine and reciprocating
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.

PUNCHES
*Pratt & Whitney Co., Dundas, Ont.

RADIATORS
Taylor-Forbes Co., Ltd., Guelph, Ont.
Warden King, Ltd., Montreal, Que.

RAILINGS, brass and iron
*Dennis Wire & Iron Works Co., London, Ont.

RAILWAY SUPPLIES
*Canadian Steel Foundries, Ltd., Montreal, Que.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
B. J. Coghlin Co., Ltd., Montreal, Que.

READY-TO-WEAR GARMENTS, ladies'
H. C. Boulter Co., Ltd., Toronto.

REAMERS
*Pratt & Whitney Co., Dundas, Ont.
*Butterfield & Co., Rock Island, P.Q.

RECEPTACLES, fibre
The Diamond State Fibre Co. of Canada, Ltd., Toronto.

REFRIGERATORS
Sanderson-Harold Co., Ltd., Paris, Ont.

REFRIGERATING MACHINERY
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

REFRIGERATORS, store, homes and institutions
Ham & Nott Co., Ltd., Brantford, Ont.
John Hillock & Co., Ltd., Toronto.

REINFORCEMENT BARS
*Burlington Steel Co., Ltd., Hamilton, Ont.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.

REINFORCEMENT FOR CONCRETE
*Canada Wire & Iron Goods Co., Hamilton, Ont.

REINFORCEMENT FOR CONCRETE ROOFING, metal
*The Pedlar People, Ltd., Oshawa, Ont.

REVOLVING DOORS
*A. B. Ormsby Co., Ltd., Toronto.

RINGS, gold
*Caron Bros., Montreal, Que.

RIVETS
*Canadian Tube & Iron Co., Ltd., Montreal, Que.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.

RIVETS, bifurcated and tubular
Parmenter & Bullock Co., Ltd., Gananoque, Ont.

RIVETS AND BURRS, iron, copper and brass
Parmenter & Bullock Co., Ltd., Gananoque, Ont.

ROCK DRILLS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

RODS, fibre
The Diamond State Fibre Co. of Canada, Ltd., Toronto.

ROLLING STEEL DOORS
*A. B. Ormsby Co., Ltd., Toronto.

ROOFING, metal
*A. B. Ormsby Co., Ltd., Toronto.

ROOFINGS, plastic, liquid, rubber
*Beveridge Paper Co., Ltd., Montreal, Supply Department.

ROOFING, ready to lay
Standard Paint Co. of Canada, Ltd., Montreal, Que.
*The Barrett Co., Ltd., Toronto and Montreal.

ROOF TRUSSES
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*Dominion Bridge Co., Ltd., Montreal, Que.

ROPE
*Doon Twines, Ltd., Doon, Ont.
*Shurly & Derrett, Ltd., Toronto.

ROPE, cotton
Hamilton Cotton Co., Hamilton, Ont.

RUBBER FOOTWEAR
*Gutta Percha & Rubber Ltd., Toronto, Ont.
The Miner Rubber Co., Ltd., Grandy, Que.

RUBBER GOODS
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Gutta Percha & Rubber Limited, Toronto.

RUBBER MACHINERY
*The Hydraulic Machinery Co., Limited, Montreal.

RUBBER MILL MACHINERY
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.

RUBBER PACKING
*Garlock Packing Co., Hamilton, Ont.

RULES
The Lufkin Rule Co. of Canada, Ltd., Windsor, Ont.

SADDLERY HARDWARE
*Dominion Forge & Stamping Co., Walkerville, Ont.

SAFES
*Goldie & McCulloch Co., Ltd., Galt, Ont.

SAMPLE CASES
*The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto, Ont.
J. Eveleigh & Co., Ltd., Montreal, Que.

SAND RAMMERS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.

SASH CORD, cotton
Hamilton Cotton Co., Hamilton, Ont.

SALT
*Canadian Salt Co., Ltd., Windsor, Ont.
Dominion Salt Co., Ltd., Sarnia, Ont.

SANITARY PAPER TOWELS
*E. B. Eddy Co., Ltd., Hull, Que.

SAVE-ALLS
*The Hydraulic Machinery Co., Limited, Montreal.

SAW SHARPENING MACHINERY
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

SAWS
*E. C. Atkins & Co., Ltd., Hamilton, Ont.
Henry Disston & Sons, Ltd., Toronto, Ont.
Shurly & Deitrich, Galt, Ont.

SAWS, cross-cut and band
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
Shurly & Deitrich, Galt, Ont.

SAWS, circular mill
Shurly & Deitrich, Galt, Ont.

SAWS, of all kinds
Simonds Canada Saw Co., Ltd., Montreal, Que.

SAWS, rip
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
Shurly & Deitrich, Galt, Ont.

SAWMILLS
G. & J. Esplen, Montreal, Que.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

SCALES
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.

SCREENS
*Canada Wire & Iron Goods Co., Hamilton, Ont.

*For Display Advertisement see Index. Page 53

SCREEN DOORS AND WINDOWS
Sanderson-Harold Co., Ltd., Paris, Ont.
Ham & Nott Co., Ltd., Brantford, Ont.
SCREWS
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.
*The National Acme Mfg. Co., Montreal, Que.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
SCREW PLATES
*Butterfield & Co., Rock Island, P.Q.
SECURITIES, engraved
American Bank Note Co., Ottawa, Ont.
SERGES
Rosamond Woollen Co., Almonte, Ont.
SEWAGE SCREENS
*The Hydraulic Machinery Co., Limited, Montreal.
SHAFTING
Canada Forge Co., Ltd., Welland, Ont.
*Canadian Drawn Steel Co., Ltd., Hamilton, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.
*Dodge Mfg. Co., Ltd., Toronto.
SHANTY BLANKETS
Slingsby Mfg. Co., Ltd., Brantford, Ont.
SHAPERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
SHEAR BLADES, iron
*Galt Knife Co., Ltd.
The Peter Hay Knife Co., Ltd., Galt, Ont.
SHEATHING
*The Barrett Co., Ltd., Toronto and Montreal.
SHEATHING, asbestos corrugated
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.
SHEET METAL STAMPINGS
Acme Stamping & Tool Works, Ltd., Hamilton, Ont.
*The Pedlar People, Ltd., Oshawa, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.
SHEETS, fibre
The Diamond State Fibre Co. of Canada, Ltd., Toronto.
SHEETS, galvanized
*Dominion Sheet Metal Co., Ltd., Hamilton, Ont.
*The Pedlar People, Ltd., Oshawa, Ont.
SHINGLES
*Bathurst Lumber Co., Ltd., Bathurst, N.B.
SHINGLE SAWS
*E. C. Atkins & Co., Inc., Hamilton, Ont.
SHINGLE STAINS
Sturgeons, Limited, Toronto.
SHIP BUILDERS
J. & R. Weir, Montreal, Que.
SHIRTS
John W. Peck & Co., Ltd., Montreal, Que.
SHIRTS, workmen's
*A. R. Clarke & Co., Ltd., Toronto.
SHOE PEGWOOD
O. Chalifour, Quebec, Que.
SHOE LININGS
Galt Knitting Co., Ltd., Galt, Ont.
SHOOKS
Barchard & Co., Ltd., Montreal.
SIGNAL CELLS
*Canadian National Carbon Co., Ltd., Toronto.
SIGNS, Advertising.
Cross Press & Sign Co., Ltd., Woodstock, Ont.
SILENT CHAIN DRIVES
*Canadian Link-Belt Co., Toronto.
SILVER BULLION
Coniagas Reduction Co., Ltd., St. Catharines, Ont.
*Deloro Smelting & Refining Co., Ltd., Deloro, Ont.
SILVERSMITH
Standard Silver Co., Toronto, Ont.
SILVERWARE, sterling
Roden Bros., Ltd., Toronto, Ont.
SINKS, enamelled
Amherst Foundry Co., Ltd., Amherst, N.S.
SKIFFS
Peterboro Canoe Co., Ltd., Peterboro, Ont.
SKYLIGHTS
*A. B. Ormsby Co., Ltd., Toronto.
*The Pedlar People, Ltd., Oshawa, Ont.
SLOTTERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
SMOKE CONSUMERS
*The Jones Underfeed Stoker Co., Ltd., Toronto, Ont.
SMOKE-STACKS
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
*E. Leonard & Sons, Limited, London, Ont.
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
*Steel Trough & Machine Co., Ltd., Tweed, Ont.
SOAPS
J. Barsalou & Co., Ltd., Montreal.
SOAP (soft, oil)
*The Imperial Varnish & Color Co., Ltd., Toronto, Ont.
SODA WATER FOUNTAINS
J. J. McLaughlin, Ltd., Toronto.
SODA WATER FOUNTAINS AND ACCESSORIES
Fletcher Mfg. Co., Ltd., Toronto.
SOIL PIPE
Anthes Foundry, Ltd., Toronto.
SOLDER
Alonzo W. Spooner, Ltd., Port Hope, Ont.
*Canada Metal Co., Toronto, Ont.
*Hoyt Metal Co., Toronto, Ont.
*Tallman Brass & Metal Co., Hamilton, Ont.
SOLDER, silver
Geo. H. Lees & Co., Hamilton, Ont.
SOLDER, wire and bar
American Can Co., Montreal, and Hamilton.
SOLDERING IRONS AND COPPERS
Brown, Boggs Co., Ltd., Hamilton.
SNOWSHOES
Holt, Renfrew, Ltd., Quebec, Que.
SPECIAL MACHINERY
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
Globe Engineering Co., Ltd., Hamilton, Ont.
SPELTER
*Consolidated Mining & Smelting Co. of Canada, Ltd., Montreal.
SPINNING AND STAMPING
*Tallman Brass & Metal, Ltd., Hamilton, Ont.
SPIRAL CONVEYORS
*Canadian Mathews Gravity Carrier Co., Ltd., Toronto, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
SPLIT PEAS
H. Murton, Ltd., Guelph, Ont.
SPOOLS
Canada Spool & Bobbin Co., Ltd., Walkerton, Ont.
SPORTING MEDALS AND TROPHIES
Roden Bros., Ltd., Toronto, Ont.
SPRAYERS
Spramotor Co., London, Ont.
SPRING COTTERS
*Richards-Wilcox Canadian Co., Ltd., London, Ont.
SPRINGS
*Canadian Steel Foundries, Ltd., Montreal, Que.
B. J. Coghlin Co., Ltd., Montreal.
Guelph Spring & Axle Co., Ltd., Guelph, Ont.
SPRINGS, carriage and automobile
Guelph Spring & Axle Co., Ltd.
SPRING SHACKLE BOLTS
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.
SPRINKLER SYSTEMS
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*The Bennett & Wright Co., Ltd., Toronto, Ont.
*Purdy, Mansell, Ltd., Toronto.
SPROCKET WHEELS
*Canadian Link Belt Co., Ltd., Toronto, Ont.
STAINS
R. C. Jamieson & Co., Ltd., Montreal, Que.
STAINS, creosote shingle
A. Muirhead Co., Ltd., Toronto.
STAMPINGS, heavy steel
Canadian Cartridge Co., Ltd., Hamilton, Ont.
STAMPS, steel, brass and rubber
Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.
STATIONERY, office
Harris Lithographing Co., Toronto.
STEAM PIPE AND BOILER COVERINGS, asbestos
*Eureka Mineral Wool & Asbestos Co., Toronto.
STEAM SHOVELS
*Canadian Mead Morrison Co., Ltd., Montreal, Que.
STEAM SPECIALTIES
*C. A. Dunham Co., Ltd., Toronto.
STEAM TRAPS
*C. A. Dunham Co., Ltd., Toronto.
STEEL
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.
*Burlington Steel Co., Ltd., Hamilton, Ont.
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
STEEL BILLETS AND BLOOMS
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
STEEL BUILDINGS
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*Dominion Bridge Co., Ltd., Montreal, Que.
*Hamilton Bridge Works Co., Ltd., Hamilton, Ont.
*Maritime Bridge Co., Ltd., New Glasgow, N.S.
*McGregor & McIntyre, Ltd., Toronto, Ont.
*MacKinnon Steel Co., Limited, Sherbrooke, P.Q.
*The Pedlar People, Ltd., Oshawa, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.
STEEL CASTINGS
Beauchemin & Fils, Ltd., Sorel, Que.
*Canadian Steel Foundries, Ltd., Montreal, Que.
*Dominion Foundries and Steel Co., Ltd., Hamilton, Ont.
*Electric Steel & Metals Co., Ltd., Welland, Ont.
STEEL DOORS, rolling
*The A. B. Ormsby Co., Ltd., Toronto, Ont.
STEEL FILING EQUIPMENT
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.
STEEL PLATE WORK
*Canadian Ingersoll Rand Co., Ltd., Sherbrooke, Que.
*Hamilton Bridge Works Co., Ltd., Hamilton, Ont.
*MacKinnon Steel Co., Limited, Sherbrooke, P.Q.
*Toronto Iron Works, Ltd., Toronto.
STEEL RODS
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
STEEL SASH
*Dennis Wire & Iron Works Co., London, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.
STEEL SHELVING
*Dennis Wire & Iron Works Co., London, Ont.
STEEL WIRE RODS
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
STELLITE
*Deloro Smelting & Refining Co., Ltd., Deloro and Toronto.
STENCILS, brass
Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.
STEREO TISSUE AND BLOTTINGS
*Beveridge Paper Co., Ltd., Montreal.
STEREOTYPING
Central Press Agency, Toronto.
STOKERS
*The Jones Underfeed Stoker Co., Ltd., Toronto, Ont.
STOOLS, steel factory
*Steel Trough & Machine Co., Ltd., Tweed, Ont.
STORAGE BATTERIES
*Northern Electric Company, Limited, Montreal, Que.
*Prest-O-Lite Company of Canada, Limited, Toronto.
STORE FITTINGS
The Canadian Office & School Furniture Co., Ltd., Preston, Ont.
STOVES
Smith Foundry Co., Ltd., Fredericton, N.B.
STOVE POLISH GRAPHITE
Black Donald Graphite Company, Limited, Calabogie, Ont.
STOVES AND RANGES
*McClary Mfg. Co., London, Ont.
STRAWS, paper drinking
Fletcher Mfg. Co., Ltd., Toronto.
STRUCTURAL STEEL WORK
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
*Dominion Bridge Co., Montreal.
*Hamilton Bridge Works Co., Ltd., Hamilton, Ont.
*McGregor & McIntyre, Ltd., Toronto, Ont.
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
SUIT CASES
J. Eveleigh & Co., Ltd., Montreal.
*The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto, Ont.
SULPHUR BURNERS
*The Hydraulic Machinery Co., Limited, Montreal.
SUPPLY DEALERS
*The Foundation Co., Ltd., Montreal, Que.
SURFACERS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
SWITCHES, railway
Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.
SWITCHES AND FROGS
*Canadian Steel Foundries, Ltd., Montreal, Que.
SWITCH STANDS
Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.
TABLE COVERS, chenille
Hamilton Cotton Co., Hamilton, Ont.
TANKS
*Canadian Des Moines Steel Co., Limited, Chatham.
*Hamilton Bridge Works Co., Ltd., Hamilton, Ont.
*Toronto Iron Works, Ltd., Toronto.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*E. Leonard & Sons, Ltd., London, Ont.
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
*Maritime Bridge Co., Ltd., New Glasgow, N.S.
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
Wm. H. White, Ville St. Pierre, Montreal, Que.
TANKS, elevated steel
*Canadian Des Moines Steel Co., Limited, Chatham.
TANKS, steel storage
*Canadian Ingersoll Rand Co., Ltd., Sherbrooke, Que.
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
*Steel Trough & Machine Co., Ltd., Tweed, Ont.
TANNERS' OILS & GREASES
Salem Oil & Grease Co. of Canada, Limited, Farnham, Que.
TANNERS' SUPPLIES
*McClary Mfg. Co., London, Ont.
TAPS
*Butterfield & Co., Rock Island, P.Q.
*Pratt & Whitney Co., Dundas, Ont.
TAPES, measuring
The Lufkin Rule Co. of Canada, Ltd., Windsor, Ont.
TELEPHONE ACCESSORIES
*Northern Electric Co., Ltd., Montreal, Que.
TENTS
Turner, J. J., & Sons, Peterboro, Ont.
TERMINALS, electric cable
*Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.
TERRA COTTA, architectural
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
TEXTILE SUPPLIES (shuttles, bobbins, spools and picker sticks)
The Lachute Shuttle Co., Ltd., Lachute Mills, P.Q.
THUMB SCREWS
*Canadian Billings & Spencer, Ltd., Welland Ont.

*For Display Advertisement see Index, Page 53

TIE TAMPERS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
TILING, rubber
*Gutta Percha & Rubber Ltd., Toronto, Ont.
TIME RECORDERS
*International Business Machines Co., Ltd., Toronto, Ont.
TINWARE, lithographed
*MacDonald Mfg. Co., Ltd., Toronto, Ont.
TIRES, bicycle, auto, carriage, truck, motorcycle.
*Gutta Percha & Rubber Ltd., Toronto, Ont.
TOILET PAPER, towels, tissues
*Beveridge Paper Co., Ltd., Montreal.
TOOLS, pneumatic
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
TOOLS, track
B. J. Coghlin Co., Ltd., Hamilton.
TOOLS, sheet metal workers'
Brown, Boggs Co., Ltd., Hamilton.
TRADE MARKS AND DESIGNS
*Ridout & Maybee, Toronto, Ont.
*The Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.
TRANSFORMERS
The Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.
TRANSLATIONS INTO FRENCH
Raoul Renault, Quebec City.
TRANSMISSION MACHINERY
*Canadian Link Belt Co., Toronto.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
TRAPS
*C. A. Dunham Co., Ltd., Toronto.
TROLLEYS
*Richard-Wilcox Canadian Co., Ltd., London, Ont.
*Northern Crane Works, Ltd., Walkerville, Ont.
TRUCKS
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*Northern Crane Works, Ltd., Walkerville, Ont.
TRUCKS, brick, tile and lumber
*Waterous Engine Works Co., Ltd., Brantford, Ont.
TRUCKS, motor
*National Steel Car Co., Ltd., Hamilton, Ont.
TRUCKS FOR OFFICE AND VAULT USE
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.
TRUNKS
Lamontagne, Ltd., Montreal, Que.
J. Eveleigh & Co., Ltd., Montreal.
*The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto.
TUBING, brass and copper
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
Canadian Seamless Wire Co., Toronto, Ont.
*Tallman Brass & Metal Co., Hamilton, Ont.
*Dominion Copper Products Co., Ltd., Montreal, Que.
TUBES, ice cream
Fletcher Mfg. Co., Ltd., Toronto.
TUBING, gold and silver
Canadian Seamless Wire Co., Toronto, Ont.
TUBES, fibre
The Diamond State Fibre Co. of Canada, Ltd., Toronto.
TUMBLERS, foundry
*Northern Crane Works, Ltd., Walkerville, Ont.
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.
TURBINES, steam
*The Canadian Crocker-Wheeler Co., Ltd., St. Catharines.
TURBINE PUMPS
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
TWEEDS
Rosamond Woollen Co., Almonte, Ont.
TWINES
*Doon Twines, Ltd., Doon, Ont.
*Shurly & Derrett, Ltd., Toronto.
TWINES, binder
Brantford Cordage Co., Ltd., Brantford, Ont.
TWINES, cotton
Hamilton Cotton Co., Hamilton, Ont.
TWIST DRILLS
*John Morrow Screw & Nut Co., Ltd., Ingersoll.
*Pratt & Whitney Co. of Canada, Dundas, Ont.
UNDERWEAR
Galt Knitting Co., Ltd., Galt, Ont.
UNDERWEAR, imperial
Kingston Hosiery Co., Ltd., Kingston, Ont.
UNIONS
*Dart Union Co., Ltd., Toronto.
UPHOLSTERED FURNITURE, leather and tapestries
Imperial Rattan Co., Ltd.
VACCUM PUMPS
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
VALVES
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*Jenkins Bros., Ltd., Montreal, Que.
*Kerr Engine Co., Ltd., Walkerville, Ont.
VALVES, for steam and water
*Jenkins Bros., Ltd., Montreal.
James Morrison Brass Mfg. Co., Ltd., Toronto. Ont.
VALVES, REDUCING
*Mason Regulator & Engineering Co., Ltd., Montreal, Que.
VARNISHES
*Ault & Wiborg Co. of Canada, Ltd., Toronto, Ont.
R. C. Jamieson & Co., Ltd., Montreal, Que.
VAULT FITTINGS, steel
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.
VAULTS AND VAULT DOORS
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
VENTILATORS
*A. B. Ormsby, Ltd., Toronto, Ont.
*The Pedlar People, Ltd., Oshawa, Ont.
WALLPAPERS
Staunton Limited, Toronto.
WASHERS
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
WASHERS, fibre
The Diamond State Fibre Co. of Canada, Ltd., Toronto.
WASHERS, plate or wrought
London Rolling Mill Co., Ltd., London, Ont.
WASTE BASKETS, fibre
The Diamond State Fibre Co. of Canada, Ltd., Toronto.
WASTES, wool and cotton
Factory Waste & Metal Co., Montreal, Que.
WATERPROOF, cement coating
Benjamin Moore & Co., Ltd., Toronto, Ont.
*Beveridge Paper Co., Ltd., Montreal. Supply Department.
*The Barrett Co., Ltd., Toronto and Montreal.
WATERPROOF, caselining
*Beveridge Paper Co., Ltd., Montreal, Supply Department.
WATER PAINTS
Sturgeons Limited, Toronto.
WEBBING, elastic
Hamilton Cotton Co., Hamilton, Ont.
WEBBING, non-elastic
Hamilton Cotton Co., Hamilton, Ont.
WELDING APPARATUS AND MATERIALS
*The Presto-O-Lite Co., Toronto.
WELL-DIGGING TOOLS AND MACHINERY
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.
WHEELS, corundum and emery
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
WELL DRILLING TOOLS AND MACHINERY
Oil Well Supply Co., Ltd., Petrolia, Ont.
WHIPS AND LASHES
Lay Whip Co., Rock Island, Que.
WHITE ARSENIC
Coniagas Reduction Co., Ltd., St. Catharines, Ont.
WHITE LEAD
*A. Ramsay & Son Co., Montreal.
WINDMILLS
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.
WIRE
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
*Laidlaw Bale Tie Co., Ltd., Hamilton, Ont.
WIRE BALE TIES
*Laidlaw Bale Tie Co., Ltd., Hamilton, Ont.
WIRE CLOTH
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*C. H. Johnston & Sons, Ltd., Montreal, Que.
WIRE, feeder and trolley
*Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.
WIRE GUARDS
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*C. H. Johnson & Sons, Limited, Montreal, Que.
WIRE, insulated electric
*Northern Electric Co., Ltd., Montreal, Que.
*Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.
WIRE, weatherproof
*Northern Electric Co., Ltd., Montreal, Que.
*Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.
WIRE ROPE
Canada Wire & Iron Goods Co., Hamilton.
*Dominion Wire Rope Co., Ltd., Montreal, Que.
*The B. Greening Wire Co., Ltd., Hamilton, Ont.
WIRE WORK
*C. H. Johnson & Sons, Limited, Montreal, Que.
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*The Geo. B. Meadows, Toronto Iron & Brass Goods Works Co., Ltd., Toronto, Ont.
WIRING DEVICES
*Northern Electric Co., Ltd., Montreal, Que.
WOOD
Standard Fuel Co., Toronto, Ont.
WOOD BORERS
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
*Canada Machinery Corporation, Ltd., Galt, Ont.
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
WOOD PRESERVATIVES
Sturgeons Limited, Toronto.
WOOD PRINTERS
Barchard & Co., Ltd., Toronto.
WOOD PULP, mechanical
La Cie de Pulpe de Chicoutimi, Chicoutimi, Que.
WOOD SHOP, general work
*Canadian Rumely Co., Ltd., Toronto, Ont.
WOOD SPLIT PULLEYS
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
WOOL
*H. V. Andrews, Toronto, Ont.
WOOD TURNING
Canada Spool & Bobbin Co., Ltd., Walkerton, Ont.
WORSTED COATINGS AND SUITINGS
Rosamond Woollen Co., Almonte, Ont.
WRAPPERS, book, bottle, etc.
*The Thompson & Norris Co. of Canada, Ltd., Toronto, Ont.
WROUGHT IRON PIPE
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
WROUGHT PIPE
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
YARNS, cotton
Hamilton Cotton Co., Hamilton, Ont.
ZINC
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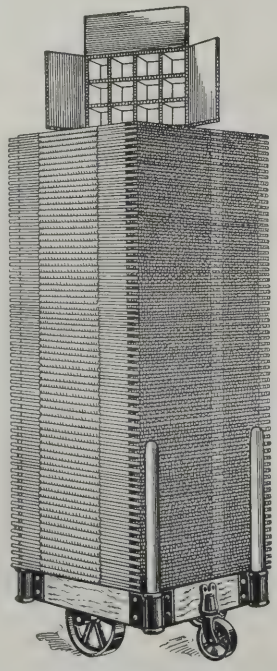
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